CDC

MMWR

Morbidity and Mortality Weekly Report

Weekly

Published March 30, 2007, for 2005 / Vol. 54 / No. 53

Summary of Notifiable Diseases — United States, 2005

The MMWR series of publications is published by the Coordinating Center for Health Information and Service, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333.

Suggested Citation: Centers for Disease Control and Prevention. [Summary of notifiable diseases—United States, 2004]. Published XXXXXX XX, 200x, for MMWR 2005;54(No. 53):[inclusive page numbers].

Centers for Disease Control and Prevention

Julie L. Gerberding, MD, MPH

Tanja Popovic, MD, PhD (Acting) Chief Science Officer

James W. Stephens, PhD (Acting) Associate Director for Science

Steven L. Solomon, MD Director, Coordinating Center for Health Information and Service

> Jay M. Bernhardt, PhD, MPH Director, National Center for Health Marketing

Judith R. Aguilar (Acting) Director, Division of Health Information Dissemination (Proposed)

Editorial and Production Staff

Frederick E. Shaw, MD, JD Editor, MMWR Series

John S. Moran, MD, MPH Guest Editor, MMWR Series

Suzanne M. Hewitt, MPA Managing Editor, MMWR Series

Teresa F. Rutledge

Lead Technical Writer-Editor Jeffrey D. Sokolow, MA

Project Editor
Beverly J. Holland

Lead Visual Information Specialist Lynda G. Cupell

Visual Information Specialist Quang M. Doan, MBA

Erica R. Shaver Information Technology Specialists

Editorial Board

William L. Roper, MD, MPH, Chapel Hill, NC, Chairman Virginia A. Caine, MD, Indianapolis, IN David W. Fleming, MD, Seattle, WA William E. Halperin, MD, DrPH, MPH, Newark, NJ Margaret A. Hamburg, MD, Washington, DC King K. Holmes, MD, PhD, Seattle, WA Deborah Holtzman, PhD, Atlanta, GA John K. Iglehart, Bethesda, MD

Dennis G. Maki, MD, Madison, WI Sue Mallonee, MPH, Oklahoma City, OK Stanley A. Plotkin, MD, Doylestown, PA

Patricia Quinlisk, MD, MPH, Des Moines, IA Patrick L. Remington, MD, MPH, Madison, WI

Barbara K. Rimer, DrPH, Chapel Hill, NC John V. Rullan, MD, MPH, San Juan, PR Anne Schuchat, MD, Atlanta, GA

Dixie E. Snider, MD, MPH, Atlanta, GA John W. Ward, MD, Atlanta, GA

CONTENTS

Preface
Background2
nfectious Diseases Designated as Notifiable at the National
Level During 20054
Data Sources5
nterpreting Data6
Transition in NNDSS Data Collection and Reporting6
Highlights7
PART 1. Summaries of Notifiable Diseases in the United
States, 200517
TABLE 1. Reported cases of notifiable diseases, by
month — United States, 2005
TABLE 2. Reported cases of notifiable diseases, by
geographic division and area — United States, 2005 20
TABLE 3. Reported cases and incidence of notifiable
diseases, by age group — United States, 200531
TABLE 4. Reported cases and incidence of notifiable
diseases, by sex — United States, 200533
TABLE 5. Reported cases and incidence of notifiable
diseases, by race — United States, 200535
TABLE 6. Reported cases and incidence of notifiable
diseases, by ethnicity — United States, 200537
PART 2. Graphs and Maps for Selected Notifiable Diseases
in the United States, 200539
PART 3. Historical Summaries of Notifiable Diseases in the
United States, 1974–200573
TABLE 7. Reported incidence of notifiable diseases —
United States, 1995-200574
TABLE 8. Reported cases of notifiable diseases —
United States, 1998-200576
TABLE 9. Reported cases of notifiable diseases —
United States, 1990-199778
TABLE 10. Reported cases of notifiable diseases —
United States, 1982-198980
TABLE 11. Reported cases of notifiable diseases —
United States, 1974–198181
TABLE 12. Deaths from selected nationally notifiable
diseases — United States, 2002–200382
Selected Reading83

Summary of Notifiable Diseases — United States, 2005

Prepared by
Scott J.N. McNabb, PhD
Ruth Ann Jajosky, DMD
Patsy A. Hall-Baker, Annual Summary Coordinator
Deborah A. Adams
Pearl Sharp
Willie J. Anderson
J. Javier Aponte
Gerald F. Jones
David A. Nitschke
Carol A. Worsham
Roland A. Richard, Jr., MPH

Division of Integrated Surveillance Systems and Services, National Center for Public Health Informatics, Coordinating Center for Health Information and Service, CDC

Preface

The Summary of Notifiable Diseases — United States, 2005 contains the official statistics, in tabular and graphic form, for the reported occurrence of nationally notifiable infectious diseases in the United States for 2005. Unless otherwise noted, the data are final totals for 2005 reported as of June 30, 2006. These statistics are collected and compiled from reports sent by state health departments to the National Notifiable Diseases Surveillance System (NNDSS), which is operated by CDC in collaboration with the Council of State and Territorial Epidemiologists (CSTE). The Summary is available at http://www.cdc.gov/mmwr/summary.html. This site also includes publications from previous years.

The Highlights section presents noteworthy epidemiologic and prevention information for 2005 for selected diseases and additional information to aid in the interpretation of surveillance and disease-trend data. Part 1 contains tables showing incidence data for the nationally notifiable infectious diseases during 2005.* The tables provide the number of cases reported to CDC for 2005 as well as the distribution of cases by month, geographic location, and the patient's demographic characteristics (age, sex, race, and ethnicity). Part 2 contains graphs and maps that depict summary data for certain notifiable infectious diseases described in tabular form in Part 1. Part 3 contains tables that list the number of cases of notifiable diseases reported to CDC since 1973. This section also includes a table enumerating deaths associated with specified notifiable diseases reported to CDC's National Center for Health Statistics (NCHS) during 2002-2003. The Selected Reading section presents general and diseasespecific references for notifiable infectious diseases. These references provide additional information on surveillance and epidemiologic concerns, diagnostic concerns, and diseasecontrol activities.

Comments and suggestions from readers are welcome. To increase the usefulness of future editions, comments about the current report and descriptions of how information is or could be used are invited. Comments should be sent to Public Health Surveillance Team — NNDSS, Division of Integrated Surveillance Systems and Services, National Center for Public Health Informatics at soib@cdc.gov.

Background

The infectious diseases designated as notifiable at the national level during 2005 are listed on page 3. A notifiable disease is one for which regular, frequent, and timely information regarding individual cases is considered necessary for the prevention and control of the disease. A brief history of the reporting of nationally notifiable infectious diseases in the United States is available at http://www.cdc.gov/epo/dphsi/nndsshis.htm. In 1961, CDC assumed responsibility for the collection and publication of data on nationally notifiable diseases. NNDSS is neither a single surveillance system nor a method of reporting. Certain NNDSS data are reported to CDC through separate surveillance information systems and through different reporting mechanisms; however, these data are aggregated and compiled for publication purposes.

Notifiable disease reporting at the local level protects the public's health by ensuring the proper identification and follow-up of cases. Public health workers ensure that persons who are already ill receive appropriate treatment; trace contacts who need vaccines, treatment, quarantine, or education; investigate and halt outbreaks; eliminate environmental hazards; and close premises where spread has occurred. Surveillance of notifiable conditions helps public health authorities to monitor the impact of notifiable conditions, measure disease trends, assess the effectiveness of control and prevention measures, identify populations or geographic areas at high risk, allocate resources appropriately, formulate prevention strategies, and develop public health policies. Monitoring surveillance data enables public health authorities to detect sudden changes in disease occurrence and distribution, identify changes in agents and host factors, and detect changes in health-care practices.

The list of nationally notifiable infectious diseases is revised periodically. A disease might be added to the list as a new pathogen emerges, or a disease might be deleted as its incidence declines. Public health officials at state health departments and CDC collaborate in determining which diseases should be nationally notifiable. CSTE, with input from CDC, makes recommendations annually for additions and deletions. Although disease reporting is mandated by legislation or regulation at the state and local levels, state reporting to CDC is voluntary. Reporting completeness of notifiable diseases is highly variable and related to the condition or disease being reported (1). The list of diseases

^{*} Because no cases of anthrax; diphtheria; domestic arboviral, western equine encephalitis virus, neuroinvasive and nonneuroinvasive, eastern equine nonneuroinvasive, and Powassen nonneuroinvasive; severe acute respiratory syndrome-associated coronavirus (SARS-CoV) disease; smallpox; or yellow fever were reported in the United States during 2005, these diseases do not appear in the tables in Part 1. For certain other nationally notifiable diseases, incidence data were reported to CDC but are not included in the tables or graphs of this Stummary. Data on chronic hepatitis B and hepatitis C virus infection past or present are undergoing quality review. Data on human immunodeficiency virus (HIV) infections are not included because HIV infection (not acquired immunodeficiency syndrome [AIDS]) reporting has been implemented on different dates and using different methods than for AIDS case reporting; however, these data are summarized in the Highlights section.

considered notifiable varies by state and year. Current and historic national public health surveillance case definitions used for classifying and enumerating cases consistently across reporting jurisdictions are available at http://www.cdc.gov/epo/dphsi/nndsshis.htm.

All states report conditions that were designated as internationally quarantinable and notifiable (i.e., cholera, plague, and yellow fever) in compliance with the International Health Regulations (IHR) issued by the World Health Organization (WHO). In May 2005, the World Health Assembly adopted revised IHR. The current IHR will be replaced by the 2005 IHR when it becomes official on June 15, 2007, unless an earlier implementation date is adopted. The 2005 IHR revision stipulates that smallpox, poliomyelitis caused by wild-type poliovirus, human influenza caused by a new subtype, and SARS-CoV are public

health events of international concern (PHEIC) and are reportable to WHO. In addition, the 2005 IHR includes an open-ended algorithm to determine other conditions or events that require mandatory reporting to WHO because they might constitute a PHEIC. Conditions for which the algorithm is used to determine notifiability include, but are not limited to, cholera, pneumonic plague, yellow fever, West Nile fever, and meningococcal disease (2). On December 13, 2006, the United States formally accepted the 2005 IHR and is taking steps to implement these new international rules.

- Doyle TJ, Glynn MK, Groseclose LS. Completeness of notifable infectious disease reporting in the United States: an analytical literature review. Am J Epidemiol 2002;155:866–74.
- World Health Organization. Third report of Committee A. Annex 2. Available at http://www.who.int/gb/ebwha/pdf_files/WHA58/ A58_55-en.pdf.

Infectious Diseases Designated as Notifiable at the National Level During 2005

Acquired immunodeficiency syndrome (AIDS)

Anthrax

Botulism

foodborne

infant

other (wound and unspecified)

Brucellosis

Chancroid

Chlamydia trachomatis, genital infection

Cholera

Coccidioidomycosis

Cryptosporidiosis

Cyclosporiasis

Diphtheria

Domestic arboviral diseases, neuroinvasive and non-

neuroinvasive[†]

California serogroup virus disease

eastern equine encephalitis virus disease

Powassan virus disease

St. Louis encephalitis virus disease

West Nile virus disease

western equine encephalitis virus disease

Ehrlichiosis

human granulocytic

human monocytic

human, other or unspecified agent

Enterohemorrhagic Escherichia coli (EHEC) infection

EHEC 0157:H7

EHEC Shiga toxin-positive, serogroup non-O157

EHEC Shiga toxin-positive, not serogrouped

Giardiasis Gonorrhea

Haemophilus influenzae, invasive disease

Hansen disease (leprosy)

Hantavirus pulmonary syndrome

Hemolytic uremic syndrome, postdiarrheal

Hepatitis A, viral, acute

Hepatitis B, viral, acute

Hepatitis B, chronic

Hepatitis B virus infection, perinatal

Hepatitis C, viral, acute

Hepatitis C virus infection (past or present)

Human immunodeficiency virus (HIV) infection

adult (age ≥13 yrs)

pediatric (age <13 yrs)

Influenza-associated pediatric mortality

Legionellosis

Listeriosis

Lyme disease

Malaria

Measles

Meningococcal disease, invasive

Mumps

Pertussis

Plague

Poliomyelitis, paralytic

Psittacosis

Q fever

Rabies

animal

human

Rocky Mountain spotted fever

Rubella

Rubella, congenital syndrome

Salmonellosis

Severe acute respiratory syndrome-associated coronavirus

(SARS-CoV) disease

Shigellosis

Smallpox

Streptococcal disease, invasive, group A

Streptococcal toxic-shock syndrome

Streptococcus pneumoniae, invasive disease

drug resistant, all ages

age <5 years

Syphilis

Syphilis, congenital

Tetanus

Toxic-shock syndrome (other than streptococcal)

Trichinellosis

Tuberculosis

Tularemia

Typhoid fever

Vancomycin-intermediate Staphylococcus aureus

infection (VISA)

Vancomycin-resistant Staphylococcus aureus infection (VRSA)

Varicella infection (morbidity)

Varicella deaths

Yellow fever

[†] The national surveillance case definition for the arboviral diseases was revised in 2005, and nonneuroinvasive arboviral diseases were added to the list of nationally notifiable infectious diseases.

Data Sources

Provisional data concerning the reported occurrence of nationally notifiable infectious diseases are published weekly in *MMWR*. After each reporting year, staff in state health departments finalize reports of cases for that year with local or county health departments and reconcile the data with reports previously sent to CDC throughout the year. These data are compiled in final form in the *Summary*.

Notifiable disease reports are the authoritative and archival counts of cases. They are approved by the appropriate chief epidemiologist from each submitting state or territory before being published in the *Summary*. Data published in *MMWR Surveillance Summaries* or other surveillance reports produced by CDC programs might not agree exactly with data reported in the annual *Summary* because of differences in the timing of reports, the source of the data, or surveillance methodology.

Data in the Summary were derived primarily from reports transmitted to CDC from health departments in the 50 states, five territories, New York City, and the District of Columbia. Data were reported for MMWR weeks 1–52, which correspond to the period for the week ending January 8, 2005, through the week ending December 31, 2005. More information regarding infectious notifiable diseases, including case definitions, is available at http://www.cdc.gov/epo/dphsi/phs.htm. Policies for reporting notifiable disease cases can vary by disease or reporting jurisdiction. The case-status categories used to determine which cases reported to NNDSS are published, by disease or condition, and are listed in the print criteria column of the 2006 NNDSS event code list (available at http://www.cdc.gov/epo/dphsi/phs/files/NNDSSeventcodelistJanuary2006.pdf).

Final data for certain diseases are derived from the surveillance records of the CDC programs listed below. Requests for further information regarding these data should be directed to the appropriate program.

Coordinating Center for Health Information and Service National Center for Health Statistics (NCHS)

Office of Vital and Health Statistics Systems (deaths from selected notifiable diseases).

Coordinating Center for Infectious Diseases (proposed) National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (proposed)

Division of HIV/AIDS Prevention (AIDS and HIV infection).

Division of STD Prevention (chancroid; Chlamydia trachomatis, genital infection; gonorrhea; and syphilis).

Division of Tuberculosis Elimination (tuberculosis).

National Center for Immunization and Respiratory Diseases (proposed)

Influenza Division (proposed) (influenza-associated pediatric mortality).

Division of Viral Diseases (proposed) (poliomyelitis, varicella deaths, and SARS-CoV).

National Center for Zoonotic, Vector-Borne, and Enteric Diseases (proposed)

Division of Vector-Borne Infectious Diseases (arboviral diseases).

Division of Viral and Rickettsial Diseases (animal rabies). Population estimates for the states are from the NCHS bridged-race estimates of the July 1, 2004, U.S. resident population from the vintage 2004 postcensal series by year, county, age, sex, race, and Hispanic origin, prepared under a collaborative arrangement with the U.S. Census Bureau. This data set was released on September 9, 2005, and is available at http://www.cdc.gov/nchs/about/major/dvs/ popbridge/popbridge.htm. Populations for territories are 2004 estimates from the U.S. Census Bureau International Data Base Data Access-Display Mode, available at http:// www.census.gov/ipc/www/idbprint.html. The choice of population denominators for incidence reported in the MMWR is based on 1) the availability of census population data at the time of preparation for publication and 2) the desire for consistent use of the same population data to compute incidence reported by different CDC programs. Incidence in the Summary is calculated as the number of reported cases for each disease or condition divided by either the U.S. resident population for the specified demographic population or the total U.S. residential population, multiplied by 100,000. When a nationally notifiable disease is associated with a specific age restriction, the same age restriction is applied to the population in the denominator of the incidence calculation. In addition, population data from states in which the disease or condition was not notifiable or was not available were excluded from incidence calculations. Unless otherwise stated, disease totals for the United States do not include data for American Samoa, Guam, Puerto Rico, the Commonwealth of the Northern Mariana Islands, or the U.S. Virgin Islands.

Interpreting Data

Incidence data in the Summary are presented by the date of report to CDC as determined by the MMWR week and year assigned by the state or territorial health department. Data are reported by the state in which the patient resided at the time of diagnosis. For certain nationally notifiable infectious diseases, surveillance data are reported independently to different CDC programs. Thus, surveillance data reported by other CDC programs might vary from data reported in the Summary because of differences in 1) the date used to aggregate data (e.g., date of report or date of disease occurrence), 2) the timing of reports, 3) the source of the data, 4) surveillance case definitions, and 5) policies regarding case jurisdiction (i.e., which state should report the case to CDC).

The data reported in the Summary are useful for analyzing disease trends and determining relative disease burdens. However, reporting practices affect how these data should be interpreted. Disease reporting is likely incomplete, and completeness might vary depending on the disease. The degree of completeness of data reporting might be influenced by the diagnostic facilities available; control measures in effect; public awareness of a specific disease; and the interests, resources, and priorities of state and local officials responsible for disease control and public health surveillance. Finally, factors such as changes in methods for public health surveillance, introduction of new diagnostic tests, or discovery of new disease entities can cause changes in disease reporting that are independent of the true incidence of disease.

Public health surveillance data are published for selected racial/ethnic populations because these variables can be risk markers for certain notifiable diseases. Race and ethnicity data also can be used to highlight populations for focused prevention efforts. However, caution must be used when drawing conclusions from reported race and ethnicity data. Different racial/ethnic populations might have different patterns of access to health care, potentially resulting in data that are not representative of actual disease incidence among specific racial/ethnic populations. Surveillance data reported to NNDSS are in either individual case-specific form or summary form (i.e., aggregated data for a group of cases). Summary data often lack demographic information (e.g., race); therefore, the demographic-specific rates presented in the Summary might be underestimated.

In addition, not all race and ethnicity data are collected uniformly for all diseases. For example, certain disease programs collect data on race and ethnicity using one or two variables, based on the 1977 standards for collecting such data issued by the Office of Management and the Budget (OMB). However, beginning in 2003, certain CDC programs, such as the tuberculosis program, implemented OMB's 1997 revised standards for collecting such data; these programs collect data on multiple races per person using multiple race variables. In addition, although the recommended standard for classifying a person's race or ethnicity is based on self-reporting, this procedure might not always be followed.

Transition in NNDSS Data Collection and Reporting

Before 1990, data were reported to CDC as cumulative counts rather than individual case reports. In 1990, states began electronically capturing and reporting individual case reports (without personal identifiers) to CDC using the National Electronic Telecommunication System for Surveillance (NETSS). In 2001, CDC launched the National Electronic Disease Surveillance System (NEDSS), now a component of the Public Health Information Network, to promote the use of data and information system standards that advance the development of efficient, integrated, and interoperable surveillance information systems at the local, state, and federal levels. One of the objectives of NEDSS is to improve the accuracy, completeness, and timeliness of disease reporting at the local, state, and national level. CDC has developed the NEDSS Base System (NBS), a public health surveillance information system that can be used by states that do not wish to develop their own NEDSS-based systems. A major feature of NBS is the ability to capture data already in electronic form (e.g., electronic laboratory results, which are needed for case confirmation) rather than enter these data manually as in NETSS. In 2005, NBS was used by 10 states to transmit nationally notifiable infectious diseases to CDC; as of January 1, 2007, NBS was used by 16 states to transmit these data to CDC. Additional information concerning NEDSS is available at http://www.cdc.gov/NEDSS.

Highlights for 2005

Below are summary highlights for certain national notifiable diseases. Highlights are intended to assist in the interpretation of major occurrences that affect disease incidence or surveillance trends (e.g., outbreaks, vaccine licensure, or policy changes).

AIDS

Since 1981, confidential name-based AIDS surveillance has been the cornerstone of national, state, and local efforts to monitor the scope and impact of the HIV epidemic. The data have multiple uses, including developing policy to help prevent and control AIDS. However, because of the introduction of therapies that effectively slow the progression of the infection, AIDS data no longer adequately represent the populations affected by the epidemic. By helping researchers to understand the epidemic at an earlier stage, HIV data, combined with AIDS data, better represent the overall impact. As of the end of 2005, a total of 43 areas (38 states, Puerto Rico, and four U.S. territories) had implemented confidential name-based HIV reporting. These 43 areas have integrated name-based HIV surveillance into their AIDS surveillance systems, whereas other jurisdictions have used other methods for reporting cases of HIV infection. Under no configuration are names or other personal identifying information collected at the national level.

During 1998–1999, declines in AIDS rates began to level. This trend followed a period of sharp declines in reported cases after 1996, when highly effective antiretroviral therapies were introduced. At the end of 2005, an estimated 437,982 persons were living with AIDS. After a substantial decrease in the number of deaths among persons with AIDS during the late 1990s, the rate of decrease declined through 2004. The number of deaths among persons with AIDS decreased 66% during 1995–2000. During 2001–2003, the number of reported deaths decreased an average of 5% annually; however, in 2004, the number of deaths increased 3% compared with the number reported in 2001. In 2005, reported deaths resumed a downward trend and decreased 17% compared with 2004.

Anthrax

No human cases of anthrax were reported in the United States during 2005. Naturally occurring anthrax epizootics are commonly reported in the United States; in 2005, epizootics were reported in four states, affecting livestock in Montana, North Dakota, and South Dakota, and livestock and game animals in Texas.

Botulism

Botulism is a severe paralytic illness caused by the toxins of *Clostridium botulinum*. Exposure to toxin can occur by ingestion (foodborne botulism) or by in situ production from *C. botulinum* colonization of a wound (wound botulism) or the gastrointestinal tract (infant botulism and adult intestinal colonization botulism) (1). In addition to the National Notifiable Diseases Surveillance System, CDC maintains intensive surveillance for cases of botulism in the United States. In 2005, cases were attributed to foodborne botulism, wound botulism, infant botulism, and intestinal colonization (2).

- 1. Sobel J. Botulism. Clin Infect Dis 2005;41:1167-73.
- CDC. Letter to state and territorial epidemiologists: surveillance for botulism: summary 2005 data. Atlanta, GA: US Department of Health and Human Services, CDC. In press.

Brucellosis

In 2005, three cattle herds in two states, and two swine herds in two states were reported by the U.S. Department of Agriculture (USDA) to be affected by brucellosis. Overall, 48 states remain designated free of cattle brucellosis by USDA (1). Brucella abortus remains enzootic in elk and bison in the greater Yellowstone National Park area, and Brucella suis is enzootic in feral swine in the southeast. Hunters exposed to these animals might be at increased risk for infection. Human cases also can occur among returned travelers or immigrants from countries with endemic brucellosis and are associated with consumption of unpasteurized milk or soft cheeses. Pathogenic Brucella species are considered category B biologic threat agents because of a high potential for aerosol transmission (2). For the same reason, biosafety level 3 practices, containment, and equipment are recommended for laboratory manipulation of isolates (3).

- Donch DA, Gertonson AA, Rhyan JH, Gilsdorf MJ. U.S. Cooperative State–Federal Brucellosis Eradication Program status report—fiscal year 2005. Washington, DC: US Department of Agriculture; 2006. Available at http://www.aphis.usda.gov/vs/nahps/brucellosis/yearly_report/ yearly-report.html.
- CDC. Bioterrorism agents/diseases, by category. Atlanta, GA: US Department of Health and Human Services, CDC; 2006. Available at http://www.bt.cdc.gov/agent/agentlist-category.asp#adef.

 CDC, National Institutes of Health. Biosafety in microbiological and biomedical laboratories (BMBL). 4th ed. Washington, DC: US Department of Health and Human Services, CDC, National Institutes of Health; 1999. Available at http://www.cdc.gov/OD/OHS/biosfty/ bmbl4/bmbl4toc.htm.

Cholera

In 2005, the largest number of laboratory-confirmed cases of toxigenic Vibrio cholerae O1 infection were reported since 1998. The average annual number of cases of cholera reported during 1995-2000 and 2001-2005 was 10.2 and 4.6 per year, respectively (1). None of the patients hospitalized for cholera died. Approximately 36% of cases were acquired outside the United States, 36% were attributable to consumption of domestic seafood, and for 27% (residents of Guam), no source was identified (3). Crabs harvested from the U.S. Gulf Coast after Hurricane Katrina were the source of illness for certain cases associated with domestic seafood (2). Certain cases associated with domestic seafood were attributed to consumption of raw seafood at a restaurant. Foreign travel and consumption of undercooked seafood continue to be the main sources of illness. Crabs harvested from the U.S. Gulf Coast are a common source of cholera, especially during warmer months, when environmental conditions favor the growth and survival of V. cholerae in brackish and coastal waters.

- Steinberg EB, Greene KD, Bopp CA, Cameron DN, Wells JG, Mintz ED. Cholera in the United States, 1995–2000: trends at the end of the millennium. J Infect Dis 2001;184:799–802.
- CDC. Two cases of toxigenic Vibrio cholerae O1 infection after Hurricanes Katrina and Rita—Louisiana, October 2005. MMWR 2006;55:31–2.
- Menon M. Investigation of an outbreak of cholera among Chuukese residents of Guam, 2005. Pacific Health Dialogue. In press.

Enterohemorrhagic Escherichia coli Infection

Escherichia coli O157:H7 has been nationally notifiable since 1994 (1). National surveillance for all Shiga toxin-producing E. coli (STEC), under the name enterohemorrhagic E. coli (EHEC), began in 2001. Surveillance categories for EHEC infection include 1) EHEC O157:H7; 2) serogroup non-O157; and 3) EHEC, not serogrouped. During 2005, cases of EHEC infection were reported from 50 states, the District of Columbia, and Puerto Rico. Of these, 74% were classified as EHEC O157:H7; 14% as EHEC, serogroup non-O157; and 12% as EHEC, not serogrouped. The majority of cases were reported during July-October.

Healthy cattle, which harbor the organism as part of their bowel flora, are the main animal reservoir for STEC. The majority of reported outbreaks are caused by contaminated food or water. The substantial decline in cases since 2002 coincided with industry and regulatory control activities and with a decrease in the contamination of ground beef (2). Direct transmission from animals and their environments to humans in settings such as petting zoos remains a public health concern (3), and prevention recommendations have been developed and disseminated (4).

- 1. Mead PS, Griffin PM. Escherichia coli O157:H7. Lancet 1998;352:1207-12.
- Naugle AL, Holt KG, Levine P, Eckel R. 2005 Food Safety and Inspection Service regulatory testing program for *Escherichia coli* O157:H7 in raw ground beef. J Food Prot 2005;68:462–8.
- Crump JA, Sulka AC, Langer AJ, et al. An outbreak of Escherichia coli O157:H7 among visitors to a dairy farm. N Engl J Med 2002;347:555–60.
- CDC. Compendium of measures to prevent disease associated with animals in public settings, 2005. MMWR 2005;54(No. RR-4).

Hansen Disease (Leprosy)

The number of reported cases of Hansen disease (HD) in the United States peaked at 361 in 1985 and has declined since 1988. HD outpatient clinics operated under the guidance and direction of the U.S. Department of Health and Human Services, Health Resources and Services Administration exist in Phoenix, Arizona; Los Angeles, Martinez, and San Diego, California; Miami, Florida; Chicago, Illinois; Baton Rouge, Louisiana; Boston, Massachusetts; New York City, New York; San Juan, Puerto Rico; Austin, Dallas, Harlingen, Houston, and San Antonio, Texas; and Seattle, Washington. Services provided to HD patients include diagnosis, treatment, follow-up of patients and contacts, disability prevention and monitoring, education, and a referral system for HD health-care services. More information is available at http://bphc.hrsa.gov/nhdp/default.htm.

Hemolytic Uremic Syndrome, Postdiarrheal

Hemolytic uremic syndrome (HUS) is characterized by the triad of hemolytic anemia, thrombocytopenia, and renal insufficiency. The most common etiology of HUS in the United States is infection with Shiga toxin-producing *Escherichia coli*, principally *E. coli* O157:H7 (1). Approximately 8% of persons infected with *E. coli* O157:H7 progress to HUS (2). During 2005, the majority of reported cases occurred among children aged <5 years.

- Banatvala N, Griffin PM, Greene KD, et al. The United States prospective hemolytic uremic syndrome study: microbiologic, serologic, clinical, and epidemiologic findings. J Infect Dis 2001;183:1063–70.
- Slutsker L, Ries AA, Maloney K, et al. A nationwide case-control study of *Escherichia coli* O157:H7 infection in the United States. J Infect Dis 1998:177:962–6.

Hepatitis A, Viral, Acute

In 2005, to further reduce morbidity and mortality from hepatitis A virus infections in the United States, CDC expanded recommendations for hepatitis A vaccination published previously (1). Hepatitis A vaccination is now recommended routinely for children aged 1 year (1) and for persons who are at increased risk for infection (e.g., international travelers, men who have sex with men [MSM], users of illicit drugs, persons working with nonhuman primates or with hepatitis A virus [HAV] in a laboratory, persons with clotting-factor disorders, and persons who have chronic liver disease), and for any person wishing to become immune (2).

Since routine childhood vaccination was recommended in 1999, the overall hepatitis A rate has declined dramatically, especially in the western states. In 2005, the rate of infection (1.5 per 100,000 population) was the lowest yet recorded. Declines have been greater in the age groups and regions for which targeted vaccination was recommended previously (1), reflecting the success of the targeted vaccination strategy.

Although rates among children have declined among all races and ethnicities, the decline among Hispanic children has been less than that among non-Hispanics. The highest rates among children are now among children in states in which morbidity was low historically and that were not included in the initial recommendations for routine childhood hepatitis A vaccination.

The decline in rates among children has resulted in a substantial shift in the epidemiologic profile of this disease in the United States. Rates in the western states, which historically have been higher than in other regions, are now similar to the rest of the country, and rates among adults are higher than those among children. These declines also have been accompanied by a shift in the pattern of reported risk factors, with an increasing proportion of cases occurring among adults at high risk for hepatitis A, including MSM and users of injection and noninjection drugs. In addition, as transmission of HAV has declined within the United States, the proportion of cases attributed to travel to countries in which hepatitis A is endemic has increased for all age groups, and travel is now the most frequently reported risk factor among persons with HAV aged <15 years.

- CDC. Prevention of hepatitis A through active or passive immunization: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2006;55(No. RR-7):1–23.
- CDC. Prevention of hepatitis A through active or passive immunization. MMWR 1999;48(No. RR-12).

Hepatitis B, Viral, Acute

Since 1990, the number of acute hepatitis B cases has declined 80%; the rate reported in 2005 was 1.8 per 100,000 population. This steady decline has coincided with the implementation of a national strategy to achieve the elimination of hepatitis B (1). The primary elements of this strategy are the screening of all pregnant women for hepatitis B virus (HBV) infection with the provision of postexposure prophylaxis to infants born to infected women; routine vaccination of all infants and children aged <19 years; and vaccination of others at increased risk for hepatitis B (e.g., health-care workers, men who have sex with men [MSM], injection-drug users [IDUs], and household and sex contacts of persons with chronic HBV infection).

In 2005, the rate of infection among children aged ≤13 years, the cohort born since routine infant vaccination was implemented, was 0.02 per 100,000 population, representing a 98% decline in that age group since 1990. By race and ethnicity, the highest rates among children continue to be among Asian/Pacific Islanders (APIs), followed by blacks, American Indians/Alaska Natives, and whites; however, since 1990, the disparity between the highest incidence group (APIs) and the lowest (whites) has been reduced 98%. A substantial number of confirmed cases in children born after 1991 occurred among children born outside the United States, including international adoptees (2). Rates among adolescents aged 12-19 years also have declined approximately 97% since 1990, but the 2005 rate (0.2 per 100,000 population) remains substantially higher than for younger children.

During 1990–2005, acute hepatitis B rates among adults declined 76%. Among adults, a high proportion of cases occur among persons in identified risk groups (i.e., IDUs, MSM, and persons with multiple sex partners), indicating a need to strengthen efforts to reach these populations with vaccine.

- CDC. Hepatitis B virus: a comprehensive strategy for eliminating transmission in the United States through universal childhood vaccination. MMWR 1991;40(No. RR-13).
- CDC. Acute hepatitis B among children and adolescents—United States, 1990–2002. MMWR 2004;53:1015–8.

HIV Infection, Adult

By December 2003, all 50 states and the District of Columbia had implemented HIV surveillance systems, including both name-based and nonname-based systems. Since 2001, a total of 37 areas (33 states, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands) have had laws or regulations requiring name-based confidential reporting for adults and adolescents with confirmed HIV infection, in addition to reporting of persons with AIDS. In 2002, CDC initiated a system to monitor HIV incidence; in 2003, CDC expanded this system and also initiated a national HIV behavioral surveillance system. CDC will assess the implementation and effectiveness of prevention activities through multiple monitoring systems, including use of new performance indicators for state and local health departments and community-based organizations (1).

At the end of 2005, a total of 212,579 adults and adolescents in the 37 areas were living with HIV infection (not AIDS). The estimated prevalence of HIV infection (not AIDS) in this group was 136.5 per 100,000 population (2). In these areas, 2005 was the first year in which mature HIV surveillance data (i.e., available since at least 2001) could be used to allow for stabilization of data collection and for adjustment of the data to monitor trends. Data from additional areas will be included in analyses when >4 years of case reports have accrued.

 CDC. Advancing HIV prevention: new strategies for a changing epidemic—United States, 2003. MMWR 2003;52:329–32.

CDC. HIV/AIDS surveillance report, 2005. Atlanta, GA: US Department of Health and Human Services, CDC, Vol. 17; 2006. Available at http://www.cdc.gov/hiv/stats/hasrlink.htm.

HIV Infection, Pediatric

At the end of 2005, in the 37 areas (33 states, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands) that have had laws or regulations since 2001 requiring confidential namebased reporting for children aged <13 years with confirmed HIV infection, an estimated 2,460 children were living with HIV infection. Estimated prevalence of HIV infection (not AIDS) in this group was 7.4 per 100,000 population (1).

CDC, HIV/AIDS surveillance report, 2005. Atlanta, GA: US Department of Health and Human Services, CDC, Vol. 17; 2006. Available at http://www.cdc.gov/hiv/stats/hasrlink.htm.

Influenza-Associated Pediatric Mortality

Early outbreaks of influenza during the 2003-04 season were associated with deaths of children in 31 states, prompting CDC to request that all state, territorial, and local health departments report laboratory-confirmed influenzaassociated deaths in children aged <18 years (1,2). During the 2003-04 influenza season, 153 pediatric influenzaassociated deaths were reported to CDC by 40 state health departments (3). Histopathologic and immunohistochemical features of fatal influenza virus infection were described in 47 of these children (4). As a result, the Council of State and Territorial Epidemiologists (CSTE) and CDC worked together to draft recommendations for national reporting of pediatric deaths with laboratory confirmation of influenza; these recommendations were approved at the 2004 CSTE annual meeting (5). In October 2004, CDC added influenza-associated pediatric mortality to the list of conditions voluntarily reportable to the National Notifiable Diseases Surveillance System (6). Reporting for this condition began in week 40 (week ending October 9, 2004) of the 2004-05 influenza season. The cumulative year-to-date incidence is published each week in the MMWR Table I for low-incidence nationally notifiable diseases.

During 2005, a total of 45 influenza-associated pediatric deaths were reported to CDC by 17 states and New York City, with California reporting 10 deaths. The median age of the deceased children was 5 years (range: 23 days-17 years); 21 (47%) were aged <5 years. Although the majority of deaths occurred in a hospital setting, six children (13%) died outside a hospital setting. Of the 45 children, 31 (69%) had an underlying or chronic condition, and 14 (31%) were previously healthy. Chronic conditions included seizure disorder, prematurity, neurologic disease, neuromuscular disorders, chronic pulmonary disease, immunosuppression, congenital anomalies, and developmental delay. Bacterial coinfections were confirmed in four children. The current recommendations of the Advisory Committee on Immunization Practices (7) highlight the importance of administering 2 doses of influenza vaccine for previously unvaccinated children aged 6 months-<9 years. Continued surveillance of severe influenza-related mortality is important to monitor the impact of influenza and the possible effects of interventions, including influenza vaccination in children.

 CDC. Update: influenza-associated deaths reported among children aged <18 years—United States, 2003–04 influenza season. MMWR 2004;52:1254–5.

- CDC. Update: influenza-associated deaths reported among children aged <18 years—United States, 2003–04 influenza season. MMWR 2004;52:1286–8.
- Bhat N, Wright JG, Broder KR, et al. Influenza-associated deaths among children in the United States, 2003–2004. N Engl J Med 2005;352: 2559–67.
- Guarner J, Paddock CD, Shieh WJ, et al. Histopathologic and immunohistochemical features of fatal influenza virus infection in children during the 2003–2004 season. Clin Infect Dis 2006;43:132–40.
- Council of State and Territorial Epidemiologists. Position statement 04-ID-04: influenza-associated pediatric mortality, 2004. Atlanta, GA: Council of State and Territorial Epidemiologists; 2004. Available at http://www.cste.org/ps/2004pdf/04-ID-04-final.pdf.
- CDC. Mid-year addition of influenza-associated pediatric mortality to the list of nationally notifiable diseases, 2004. MMWR 2004;53:951–2.
- CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2006;55(No. RR-10).

Listeriosis

Listeriosis is a rare but severe infection caused by *Listeria monocytogenes* that has been nationally notifiable since 2000. Listeriosis is primarily foodborne and occurs most frequently among persons who are older, pregnant, or immunocompromised. During 2005, the majority of cases occurred among persons aged ≥60 years.

Molecular subtyping of *L. monocytogenes* isolates and sharing of that information through PulseNet (2) has enhanced the ability of public health officials to detect and investigate outbreaks of listeriosis. Recent outbreaks have been linked to ready-to-eat deli meat (1) and unpasteurized cheese (3). During 2005, incidence of listeriosis as reported to FoodNet active surveillance was 0.27 per 100,000 population, representing a decrease of 32% compared with 1996–1998 (4).

All clinical isolates should be submitted to state public health laboratories for pulsed-field gel electrophoresis (PFGE) pattern determination, and all persons with listeriosis should be interviewed by a public health official or health-care provider using a standard *Listeria* case form, available at http://www.cdc.gov/foodborneoutbreaks/documents/ListeriaCaseReportFormOMB0920-0004.pdf. Rapid analysis of surveillance data will allow identification of possible food sources of outbreaks. In 2005, an outbreak linked to turkey deli meat was detected by this method (CDC, unpublished data, 2005).

- Gottlieb SL, Newbern EC, Griffin PM, et al. Multistate outbreak of listeriosis linked to turkey deli meat and subsequent changes in US regulatory policy. Clin Infect Dis 2006;42:29–36.
- CDC. What is PulseNet? Atlanta, GA: US Department of Health and Human Services, CDC; 2006. Available at http://www.cdc.gov/pulsenet/ whatis.htm.

- MacDonald PDM, Whitwam RE, Boggs JD, et al. Outbreak of listeriosis among Mexican immigrants caused by illicitly produced Mexicanstyle cheese. Clin Infect Dis 2005;40:677–82.
- CDC. Foodborne Diseases Active Surveillance Network (FoodNet): FoodNet surveillance report for 2004 (final report). Atlanta, GA: US Department of Health and Human Services, CDC; 2006.

Measles

Nearly all of confirmed measles cases reported in 2005 were import-associated. Half of all cases occurred among children aged 5-19 years. Overall measles morbidity increased 79% after a record low number of cases in 2004. The increase was the result primarily of an outbreak in Indiana among a group of members of a single church who had not been vaccinated for measles. This outbreak was the largest outbreak in the United States since 1996 and the largest in Indiana since 1990. The source of the outbreak was an unvaccinated U.S. resident who had acquired measles infection while traveling in Romania (1). The majority of all cases among U.S. residents can be prevented by following current recommendations for vaccination, including specific guidelines for travelers (2,3). Although the elimination of endemic measles in the United States has been achieved, and population immunity remains high (4), an outbreak can occur when measles is introduced into a susceptible group. Indiana public health officials estimated that the cost of containing the disease was approximately \$168,000 (5).

- CDC. Import-associated measles outbreak—Indiana, May–June 2005. MMWR 2005;54:1073–5.
- CDC. Preventable measles among U.S. residents, 2001–2004. MMWR 2005;54:817–20.
- CDC. Measles, mumps, and rubella—vaccine use and strategies for elimination of measles, rubella, and congenital rubella syndrome and control of mumps: recommendations of the advisory committee on immunization practices (ACIP). MMWR 1998;47(No. RR-8).
- Hutchins SS, Bellini WJ, Coronado V, et al. Population immunity to measles in the United States. J Infect Dis 2004;189(Suppl 1):S91–7.
- Parker AA, Staggs W, Dayan G, et al. Implications of a 2005 measles outbreak in Indiana for sustained elimination of measles in the United States. N Engl J Med 2006;355:447–55.

Meningococcal Disease, Invasive

Neisseria meningitidis is a leading cause of bacterial meningitis and sepsis in the United States. Despite declining incidence, the case-fatality ratio (10%–14%) remains high, and 11%–19% of survivors have serious health sequelae, including hearing loss, amputations, and cognitive impairment. Rates of meningococcal disease are highest among infants, with a second peak at age 18 years (1). The

proportion of cases caused by each serogroup of *N. meningitidis* varies by age group. The majority of cases in infants are caused by serogroup B, for which no vaccine is licensed in the United States.

A new tetravalent (A, C, Y, W-135) meningococcal conjugate vaccine ([MCV4] Menactra®; manufactured by Sanofi Pasteur, Swiftwater, Pennsylvania) was licensed in January 2005 for persons aged 11–55 years. CDC's Advisory Committee on Immunization Practices recommends routine vaccination with MCV4 of young adolescents aged 11–12 years, adolescents at high school entry if not vaccinated previously, college freshmen living in dormitories, and other populations at increased risk for meningococcal disease (1). The new conjugate vaccine is an important addition to meningococcal disease prevention strategies. Further reductions in meningococcal disease could be achieved with the development of an effective serogroup B vaccine.

 CDC. Prevention and control of meningococcal disease: recommendations of the Advisory Committee on Immunization Practice (ACIP). MMWR 2005;54(No. RR-7).

Pertussis

In 2005, incidence of reported pertussis remained stable at 8.7 cases per 100,000 population after doubling during 2003-2004. Infants aged <6 months, who are too young to be fully vaccinated, had the highest reported rate of pertussis (160.81 per 100,000 population), but adolescents aged 10-19 years and adults aged ≥20 years contributed the greatest number of reported cases (60%). Adolescents and adults might be a source of transmission of pertussis to young infants who are at higher risk for severe disease and death (1). In addition to routine use of tetanus toxoid. reduced diphtheria toxoid, and acellular pertussis vaccine (Tdap) in adolescents aged 11-18 years as recommended by the Advisory Committee on Immunization Practices (ACIP) in 2005, ACIP recommends use of Tdap for a single dose to replace the next dose of Td for adults aged 19-64 years (2,3). Use of Tdap also is recommended for certain populations of adults, including health-care workers and persons in close contact with infants aged <12 months (3,4).

- Bisgard KM, Pascual FB, Ehresmann KR, et al. Infant pertussis: who was the source? Pediatr Infect Dis J 2004;23:985–9.
- CDC. Preventing tetanus, diphtheria, and pertussis among adolescents; use of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccines; recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2006;55(No. RR-3).

- CDC. ACIP votes to recommend use of combined tetanus, diphtheria and pertussis (Tdap) vaccine for adults. Atlanta, GA: US Department of Health and Human Services, CDC; 2006. Available at http://www.cdc.gov/ nip/vaccine/tdap/tdap_adult_recs.pdf.
- 4. CDC. Prevention of tetanus, diphtheria and pertussis among pregnant women: provisional ACIP recommendations for the use of Tdap vaccine. Atlanta, GA: US Department of Health and Human Services, CDC; 2006. Available at http://www.cdc.gov/nip/recs/provisional_recs/ tdap-preg.pdf.

Poliomyelitis, Paralytic

In 2005, an imported case of vaccine-associated paralytic poliomyelitis (VAPP) was reported to the National Notifiable Diseases Surveillance System. In addition, type 1 vaccine-derived poliovirus (VDPV) infections were reported to CDC. The VAPP case occurred in an unvaccinated U.S. college student aged 22 years who was residing temporarily in Costa Rica, where she likely was exposed through contact with an infant who had recently been vaccinated with oral polio vaccine (OPV) (1). Although the risk is extremely low, health-care providers should be aware of contact VAPP; be alert to the diagnosis of polio, especially in unvaccinated persons with onset of acute flaccid paralysis; and obtain stool cultures for poliovirus testing. Electrodiagnostic studies can assist in differentiating polio from demyelinating conditions such as Guillain-Barré syndrome. The VDPV infections occurred among an Amish population in Minnesota. The index case-patient was an Amish infant with severe combined immune deficiency who underwent stool culture examination for diarrhea and failure to thrive. Community investigations demonstrated circulation of VDPV infection in the local Amish community but not in other related communities in the United States and Canada. No cases of paralytic disease or other clinically compatible illnesses caused by poliovirus were identified (2). VDPVs emerge from OPV viruses as a result of continuous replication in immune-deficient persons or their circulation in populations with low vaccination coverage. Because OPV has not been used in the United States since 2000 and in Canada since 1997, the original source of the VPDV infection was likely a person who received OPV in another country. Both situations highlight the risks for U.S. citizens of not being vaccinated and the importance of continued polio surveillance.

- CDC. Imported vaccine-associated paralytic poliomyelitis—United States, 2005. MMWR 2006;55:97-9.
- CDC. Poliovirus infections in four unvaccinated children—Minnesota, August–October 2005. MMWR 2005;54:1053–5.

Rabies

During 2005, the majority (92%) of animal rabies cases were reported in wild animal species. Overall, 6.2% fewer cases of animal rabies were reported in 2005 compared with 2004 (1). In the United States, five animal species are recognized as reservoir species for various rabies virus variants over defined geographic regions: raccoons (eastern United States), skunks (north and south central United States and California), bats (various species in all U.S. states except Hawaii), foxes (in Alaska, Arizona, and Texas), and mongoose (in Puerto Rico). The reported number of cases decreased among all wildlife species, except bats and mongooses. Reported cases of rabies in domestic animals remain low in part because of high vaccination rates. As in the preceding decade, cats were the most commonly reported domestic animal with rabies during 2005. Vaccination programs to control rabies in wild carnivores were ongoing through the distribution of baits containing an oral rabies vaccine in the eastern United States and Texas. Oral rabies vaccination programs in Texas have demonstrated continued success (2). These programs appear to have eliminated a rabies virus variant associated with coyotes and dogs along the U.S.-Mexico border and have reduced the area affected by a variant associated with gray foxes. No cases associated with the coyote/dog variant and few cases of the gray fox variant were reported during 2005. Oral rabies vaccination programs also are being conducted in the eastern United States in an attempt to stop the westward spread of the raccoon rabies virus variant. Active surveillance efforts conducted by the United States Department of Agriculture (USDA) to monitor oral rabies vaccination programs were further enhanced by USDA's use of the Direct Rapid Immunohistochemical Test (DRIT) in the second half of 2005 after training at CDC. This test is used for screening samples collected by USDA, reducing the burden on state laboratories, and permitting faster processing of surveillance samples (3). One case of rabies was identified in a human in Mississippi during 2005. This case was identified retrospectively after the Mississippi Department of Health submitted samples to CDC's unexplained deaths project (4).

- Krebs JW, Mandel EJ, Swerdlow DL, et al. Rabies surveillance in the United States during 2004. J Am Vet Med Assoc 2005;227:1912–25.
- Sidwa TJ, Wilson PJ, Moore GM, et al. Evaluation of oral rabies vaccination programs for control of rabies epizootics in coyotes and gray foxes: 1995–2003. J Am Vet Med Assoc 2005;227:785–92.
- Lembo T, Niezgoda M, Hamir AN, et al. Evaluation of a direct, rapid immunohistochemical test for rabies diagnosis. Emerg Infect Dis 2006;12:310–3.
- 4. CDC. Human rabies-Mississippi, 2005. MMWR 2006;55:207-8.

Salmonellosis

During 2005, as in previous years, the majority of salmonellosis cases occurred among persons aged <5 years. Since 1993, the most frequently reported isolates have been Salmonella enterica serotype Typhimurium and S. enterica serotype Enteritidis (1). The epidemiology of Salmonella has been changing. S. enterica serotype Typhimurium has decreased in incidence, while the incidence of serotypes Newport, Mississippi, and Javiana have increased. Specific control programs (e.g., farm-based egg—quality assurance programs) have led to reduction of serotype Enteritidis infections, which have been associated with the consumption of internally contaminated eggs. Rates of antibiotic resistance among certain serotypes have been increasing: a substantial proportion of serotypes Typhimurium and Newport isolates are resistant to multiple drugs (2).

The epidemiology of Salmonella infections is based on serotype characterization, and in 2005, the Council of State and Territorial Epidemiologists adopted a position statement for serotype-specific reporting of laboratory confirmed salmonellosis cases (3). However, reporting through the National Notifiable Diseases Surveillance System (NNDSS) does not include serotype, and for users of NNDSS, serotype for Salmonella isolates are reported through the Public Health Laboratory Information System (PHLIS). NEDSS or compatible systems eventually will replace PHLIS; users of NEDSS or compatible systems should report serotype in NEDSS.

- CDC. Salmonella surveillance summary, 2004. Atlanta, GA: US Department of Health and Human Services, CDC; 2005. Available at http://www.cdc.gov/ncidod/dbmd/phlisdata/salmonella.htm.
- CDC. National Antimicrobial Resistance Monitoring System for enteric bacteria (NARMS): 2003 human isolates, final report. Atlanta, GA: US Department of Health and Human Services, CDC; 2006.
- Council of State and Territorial Epidemiologists. Position statement: serotype specific national reporting for salmonellosis. Atlanta, GA: Council of State and Territorial Epidemiologists; 2005. Available at http:// www.cste.org/PS/2005pdf/final2005/05-ID-09final.pdf.

Shigellosis

The approximately 16,000 cases of shigellosis reported to CDC in 2005 represent an increase over the all-time low of approximately 14,000 cases reported in 2004. Reported annual totals during 1978–2003, with the exception of 2004, have consistently exceeded 17,000 cases. Shigella sonnei infections continue to account for >75% of shigellosis in the United States (1,2). In 2005, a strain of S. sonnei resistant to ampicillin and trimethoprim-sulfamethoxazole emerged as a cause of prolonged, community-wide

outbreaks of shigellosis associated with day care centers in three states (3). Antimicrobial treatment options for children infected with this strain are limited and include oral azithromycin, "off-label" use of fluoroquinolones, or intramuscular agents such as ceftriaxone (3,4). In addition to spread from one person to another, shigellae can be transmitted through contaminated foods, sexual contact, and water used for drinking or recreational purposes (1).

- Gupta A, Polyak CS, Bishop RD, Sobel J, Mintz ED. Laboratoryconfirmed shigellosis in the United States, 1989–2002: epidemiologic trends and patterns. Clin Infect Dis 2004;38:1372–7.
- Shane A, Crump J, Tucker N, Painter J, Mintz E. Sharing Shigella: risk factors and costs of a multi-community outbreak of shigellosis. Arch Pediatr Adolesc Med 2003;157:601–3.
- CDC. Outbreaks of multidrug-resistant Shigella sonnei gastroenteritis associated with day care centers—Kansas, Kentucky, and Missouri, 2005. MMWR 2006;55:1068–71.
- Sivapalasingam S, Nelson JM, Joyce K, Hoekstra M, Angulo FJ, Mintz ED. A high prevalence of antimicrobial resistance among *Shigella* isolates in the United States, 1999–2002. Antimicrob Agents Chemother 2006;50:49–54.

Syphilis, Primary and Secondary

In 2005, primary and secondary syphilis cases reported to CDC increased for the fifth consecutive year (1). The overall increase in 2005 was 9.3%. Although the rate of syphilis infection increased mostly among men, for the first time in >10 years, the rate also increased among women. Rates increased among black, white, and Hispanic men and women. In collaboration with partners throughout the United States, CDC updated the Syphilis Elimination Plan for 2005–2010 and is now working to implement it (2).

- CDC. Sexually transmitted disease surveillance, 2005. Atlanta, GA: US Department of Health and Human Services, CDC; 2006. Available at http://www.cdc.gov/std/stats/toc2005.htm.
- CDC. The National Plan to Eliminate Syphilis from the United States. Atlanta, GA: US Department of Health and Human Services, CDC; 2006.

Tetanus

Rates of reported tetanus in 2005 (0.095 cases per 1 million population) continue at historically low levels. Two fatalities were attributed to tetanus in 2005: a woman aged 94 years who had never received tetanus toxoid vaccination, and a woman aged 73 years with an unknown vaccination history. The majority (85%) of tetanus cases occurred among persons aged >25 years; 44% occurred among persons aged 25–59 years, and 41% occurred among persons aged >60 years. No neonatal cases were reported.

Tularemia

In the United States, tularemia is caused by two subspecies of Francisella tularensis: subspecies tularensis (type A) and subspecies holarctica (type B). A recent analysis combining national surveillance data with laboratory testing demonstrated marked differences in the demographic and geographic distribution of type A and type B infections (1). Patients with type A infections were younger and less likely to have a reported immunocompromising condition than patients with type B infections. Type A infections were predominant on the eastern seaboard, in and around Arkansas and Oklahoma, and from the Rocky Mountains in Colorado west to the Sierra Nevada mountains in California. Infections reported from the northern Pacific Coast and along tributaries of the Mississippi River typically were type B. Further subtyping of type A isolates by pulsed-field gel electrophoresis identified two distinct genetic groups, one causing infections east of the 100th meridian (East) and the other to the west (West). Mortality among patients with type A-East infections was 14%, compared with 9% for patients with type B infections, and 0 for patients with type A-West infections. To define the epidemiology of tularemia in the United States further, CDC encourages reporting of cases and submission of F. tularensis isolates to the CDC laboratory in Fort Collins, Colorado.

 Staples JE, Kubota KA, Chalcraft LG, Mead PS, Petersen JM. Epidemiologic and molecular analysis of human tularemia, United States, 1964– 2004. Emerg Infect Dis 2006;12:1113–8.

Typhoid Fever

In 2005, the number of cases of typhoid fever in the United States reported to CDC remained essentially stable. Despite recommendations that travelers to countries in which typhoid fever is endemic should be vaccinated with either of two effective vaccines available in the United States, approximately three fourths of all cases occur among persons who report international travel during the preceding month. Persons visiting friends and relatives in south Asia appear to be at particular risk, even during short visits (1,2). Salmonella Typhi strains with decreased susceptibility to ciprofloxacin are increasingly frequent in that region and might require treatment with alternative antimicrobial agents (3). In 2005, the first case of truly ciprofloxacin-resistant S. Typhi infection in the United States was identified. Cases of paratyphoid fever caused by Salmonella Paratyphi A make up an increasing proportion of all cases of enteric fever diagnosed in the United States (CDC, unpublished data,

2006). During 2004–2005, patients with paratyphoid fever were even more likely than those patients with typhoid fever to have acquired their infections in south Asia and to be infected with fluoroquinolone-resistant strains.

- Steinberg EB, Bishop RB, Dempsey AF, et al. Typhoid fever in travelers: who should be targeted for prevention? Clin Infect Dis 2004;39:186–91.
- Olsen SJ, Bleasdale SC, Magnano AR, et al. Outbreaks of typhoid fever in the United States, 1960–1999. Epidemiol Infect 2003;130:13–21.
- Crump J, Barrett TJ, Nelson JT, Angulo FJ. Reevaluating fluoroquinolones breakpoints for Salmonella enterica serotype Typhi and for non-Typhi Salmonellae. Clin Infect Dis 2003;37:75–81.

Varicella (Chickenpox)

In 2003, varicella infection was again added to the nationally notifiable disease list with the recommendation that states implement statewide individual case reporting by 2005 (1). The objectives of varicella surveillance at state and national levels are to monitor the impact of the varicella vaccination program on the epidemiology of varicella by person (e.g., age, vaccination status, and severity), place, and time, and to evaluate vaccine policy. As of 2005, a total of 30 states and the District of Columbia were conducting either statewide or sentinel case-based surveillance for varicella.

Council of State and Territorial Epidemiologists. CSTE position statement 02-ID-06: varicella surveillance. Atlanta, GA: Council of State and Territorial Epidemiologists; 2003. Available at http://www.cste.org/position%20statements/02-ID-06.pdf.

PART 1

Summaries of Notifiable Diseases in the United States, 2005

Abbreviations and Symbols Used in Tables

- U Data not available.
- Not notifiable (i.e., report of disease is not required in that jurisdiction).
- No reported cases.
- Notes: Rates < 0.1 after rounding are listed as 0.

Data in the MMWR Summary of Notifiable Diseases — United States, 2005 might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, and the use of different case definitions.

a of natifiable diseases * by month - United States 2005

Disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Tota
AIDS†	2.905	2,695	4,274	3,130	3,255	3,877	3,631	3,219	3,353	3,963	2,943	3,875	41,120
Botulism													
foodborne	1	_	_	-	-	1	2	9	1	_	2	3	19
infant	4	4	5	4	10	10	9	8	8	10	3	10	85
other (wound & unspec	cified) 1	1	1	3	3	1	1	4	3	5	2	6	31
Brucellosis	3	8	8	11	12	8	13	14	7	12	9	15	120
Chancroid [§]	2	2	2	2	1	1	-	_	-min	1	2	4	17
Chlamydia ^{§¶}	67.989	76,735	76,283	91,530	75,649	72,200	91,765	75,576	71,290	94,206	70,134	113,088	976,445
Cholera	_		_	1	-	1	-	2		2	1	1	
Coccidioidomycosis	360	335	251	304	326	295	328	510	319	584	565	2,365	6,542
Cryptosporidiosis	129	138	147	212	175	179	394	947	1,495	874	354	615	5,659
Cyclosporiasis	2	2	6	44	229	123	79	20	7	2	13	16	543
Domestic arboviral disea													
California serogroup	2000												
neuroinvasive	_	_	_	1	1	5	15	20	20	11	inter	_	73
nonneuroinvasive		_	_	_	_	_	1	5	1	-	-	-	1
eastern equine, neuroi	nvasive —	_	_			2	4	11	3	1	-		2
Powassan, neuroinvas			-	-	_	_		1	-	-	learni.	-	
St. Louis	100												
neuroinvasive						-	_	1	5	-	1	-	1
						1	1	1	3	_	_	_	
nonneuroinvasive	_					,			O				
West Nile		_	1		1	21	191	590	407	91	6	1	1,309
neuroinvasive	1	1	1	1	10	39	326	849	402	54	7	_	1,69
nonneuroinvasive	1	1	1		10	33	020	040	402	54			1,00
Ehrlichiosis		4	7	29	36	97	175	96	96	68	32	146	78
human granulocytic	4	5	10	8	16	35	87	66	72	59	34	110	50
human monocytic		2	2	1	5	23	38	10	9	10	2	8	11:
human (other & unsp	ecilled) 2	2	2	1.	3	2.3	30	10	3	10	6	0	***
Enterohemorrhagic Escherichia coli infect	ion												
O157:H7	58	73	87	127	116	190	317	338	367	451	181	316	2,62
	50	10	07	167	110	100	017	000	001	-101	141	0,0	-,
Shiga toxin-positive non-O157	13	17	14	18	22	29	58	53	55	68	31	123	50
	14	11	8	22	19	12	29	62	56	61	26	87	40
not serogrouped	1,047	1,179	1,284	1,579	1,242	1,261	1,899	1,916	2,096	2.464	1,365	2,401	19,73
Giardiasis Gonorrhea [§]	25,339	24,520	24,706	29,739	23,995	24.610	33,106	27.189	26.335	33,221	25,012	41,821	339,59
		24,520	24,700	29,739	23,995	24,010	33,100	27,100	20,000	30,221	20,012	41,021	000,00
Haemophilus influenzae invasive disease													
all ages, serotypes	182	205	220	255	208	192	188	113	146	158	129	308	2,30
age <5 yrs				1	1	1	_	_	2	_	1	3	
serotype b	_		**			9	10		11	16	3	17	13
nonserotype b	3	15	19	9	10			13			13	27	21
unknown serotype	14	24	24	22	17	16	13	20	14	13	3	24	8
Hansen disease (lepros		2	4	6	5	19	6	6	3			-	
Hantavirus pulmonary s		2	-	1	4	5	5	2	3	1	1	2	2
Hemolytic uremic syndr							4.74	200	00	0.4	40	47	
postdiarrheal	4	11	9	17	10	17	17	33	22	24	10	47	22
Hepatitis, viral, acute						0.07.5	011	000	460	100	070	7770	4 44
Α ·	267	331	278	337	262	276	344	362	482	498	272	779	4,48
В	331	382	341	469	343	337	468	352	367	454	334	941	5,11
C	33	32	39	47	38	50	63	45	58	70	42	135	65

* No cases of anthrax; diphtheria; domestic arbovial disease, western equine encephalitis virus, neuroinvasive and nonneuroinvasive, eastern equine nonneuroinvasive, and Powassen nonneuroinvasive; severe acute respiratory syndrome—associated coronavirus (SARS-CoV) disease; smallpox; or yellow fever were reported in 2005. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review. Data on human immunodeficiency virus (HIV) infections are not included because HIV infection reporting has been implemented on different dates and using different methods than for acquired immunodeficiency syndrome (AIDS) case reporting.

Total number of AIDS cases reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) (proposed), through December 31, 2005.

§ Totals reported to the Division of STD Prevention, NCHHSTP (proposed), as of May 5, 2006.

Chlamydia refers to genital infections caused by Chlamydia trachomatis.

Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (NCZVED) (proposed) (ArboNET Surveillance), as of June 23, 2006.

TABLE 1. (Continued) Reported cases of notifiable diseases,* by month — United States, 2005

Disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Influenza-associated													
pediatric mortality ^{††}	4	10	10	4	4	3	3	1	1	_	1	4	45
Legionellosis	95	76	78	88	96	141	348	250	284	319	222	304	2,301
Listeriosis	40	34	42	47	38	54	114	109	98	130	79	111	896
Lyme disease	448	377	470	562	784	2,293	5,929	3,965	2,124	1,957	1,211	3,185	23,305
Malaria	105	79	80	99	90	118	173	150	146	127	96	231	1,49
Measles	3	4	3	5	1	2	33	2	4	-	3	6	66
Meningococcal disease, invasive													
all serogroups	102	121	142	129	108	115	82	55	59	81	78	173	1,245
serogroup A, C, Y, & W-	135 26	31	39	34	29	30	15	14	14	17	16	32	297
serogroup B	12	12	16	16	10	16	11	4	8	12	6	33	15
other serogroup	5	4	3	4	2	2	1	2	1		1	2	2
serogroup unknown	59	74	84	75	67	67	55	35	36	52	55	106	76
Mumps	18	28	19	25	26	26	27	52	15	19	23	36	314
Pertussis	1,724	1,630	1,196	1,598	1,816	1,818	2,508	2,137	1,974	2,584	1,879	4,752	25,610
Plague	_	_	-	-	2	-	2	1	2		-	1	
Poliomyelitis, paralytic§§	-	_	_	_	_	_	_	_	_	1	_	-	
Psittacosis	_	1	-	5	-	1	4	1	1	1	_	2	10
Q fever	6	2	6	10	14	24	19	14	12	14	3	12	130
Rabies													
animal	485	291	464	732	551	466	565	582	550	525	332	372	5,91
human	1	_	_	_	-	-	_	_	1	_		_	
Rocky Mountain spotted for	ever 41	40	35	57	81	185	243	290	234	192	168	370	1,93
Rubella	_	1	1	2	1	1	2	1	_	-	_	2	1
Rubella, congenital syndro	me -	_	1	_	-	-	-	_	_	-	-	_	
Salmonellosis	1,745	1,730	2,009	2,731	3,154	3,777	5,585	5,149	5,016	5,589	3,384	5,453	45,32
Shigellosis	655	790	918	1,071	1,092	1,195	1,574	1,485	1,641	2,060	1,322	2,365	16,16
Streptococcal disease,													
invasive, group A	345	421	469	600	436	362	378	260	215	294	265	670	4,71
Streptococcal toxic-shock	(
syndrome	13	14	22	31	12	9	6	3	2	2	5	10	12
Streptococcus pneumonia	ie,												
invasive disease													
drug resistant, all ages		268	335	371	263	207	161	93	99	161	194	621	2,99
age <5 yrs Syphilis [¶] ¶	94	112	167	164	155	118	80	48	45	103	117	292	1,49
all stages***	2,056	2,370	2,489	3,392	2,660	2,662	3,156	2,631	2,326	3,268	2,429	3,839	33,27
congenital (age <1 yr)	25	32	25	26	27	36	28	24	28	21	20	37	32
primary & secondary	532	612	562	880	698	675	830	716	592	916	672	1,039	8,72
Tetanus	-	2	3	1	3	3	3	1	2	2	1	6	2
Toxic-shock syndrome	8	6	7	6	8	10	9	6	8	1	3	18	9
Trichinellosis	1	_	_	1	1	2	5	2	2	_	_	2	1
Tuberculosis†††	589	799	1,116	1,036	1,103	1,334	1,110	1,174	1,231	1,146	1,150	2,309	14,09
Tularemia	1	_	2	3	7	31	24	26	18	20	4	18	15
Typhoid fever	20	10	19	25	17	24	32	29	39	51	14	44	32
Vancomycin-intermediate													
Staphylococcus aureus	-	_	-	-	-	-	-	_	1	-	1	-	
Vancomycin-resistant													
Staphylococcus aureus	_	_	_	2	-	_			_	1	_	-	
Varicella (chickenpox)	1,869	2,261	2,851	3,180	2,813	2,401	1,776	1,211	1,363	3,167	2,924	6,426	32,24
Varicella (deaths)§§§	_	_	_	1	1	_	_	_	-	1	nine.	_	

†† Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD) (proposed), as of December 31, 2005.

totals reported to the initidenza bivision, National Center for immunization and Respiratory Diseases (NCHD) (proposed), as of December 31, 2005.

Cases of vaccine-associated paralytic polio (VAPP) caused by polio vaccine virus.

Totals reported to the Division of STD Prevention, NCHHSTP (proposed), as of May 5, 2006.

Includes the following categories: primary, secondary, latent (including early latent, late latent, and latent syphilis of unknown duration), neurosyphilis, late (including late syphilis with clinical manifestations other than neurosyphilis), and congenital syphilis.

††† Totals reported to the Division of TB Elimination, NCHHSTP (proposed), as of May 12, 2006.

959 Death counts provided by the Division of Viral Diseases, NCIRD (proposed), as of December 31, 2005.

	Total resident population			Botulism			
Area	(in thousands)	AIDS†	Foodborne	Infant	Other [§]	Brucellosis	Chancroid ¹
Inited States	293,655	41,120°°	19	85	31	120	17
New England	14.238	1.546	augus	1	_	2	1
Connecticut	3,504	674	-		_	_	_
//aine	1,317	22	_	_	_	1	1
Massachusetts New Hampshire	6,416 1,299	716 37	_	1	_	1	_
Rhode Island	1.081	90	_	_	_		_
/ermont	621	7	_	_	_	-	_
Mid. Atlantic	40.332	9,150	2	15	4	12	1
New Jersey	8,699	1,276	2	7	_	1	_
New York (Upstate)	11,123 8,104	1,516 4,834	****	_	4	4	1
New York City Pennsylvania	12,406	1,524	_	8	_	1	-
	46,033	4,102	2	1		19	1
E.N. Central Ilinois	12,714	1,938	1	1	_	13	_
ndiana	6,238	414	_	_	_	_	_
Michigan	10,113	829	1	_	_	1	_
Ohio Wisconsin	11,459 5,509	796 125	_	_	=	2	1 -
		890		1	1	7	
W.N. Central owa	19,697 2,954	890 95	_	1	_	1	=
Kansas	2,735	110	-	and the same of	_	1	_
Minnesota	5,101	223	-	7	_	1	_
Missouri	5,755 1,747	384 49	_	1		1 3	=
Nebraska North Dakota	634	10	_	=	_	3	=
South Dakota	771	19	_	-	1	_	_
S. Atlantic	55.182	12,223	1	9	_	15	6
Delaware	830	177	_	2	_	2	_
District of Columbia	554	708	_		-	1	1
Florida Georgia	17,397 8,829	5,055 2,396	_	1	_	3	
Maryland	5,558	1,596	_	5	_	1	_
North Carolina	8,541	945	1	_	-	3	5
South Carolina	4,198 7,460	621 649	_	1	-	1	_
Virginia West Virginia	1,815	76	_		_		_
E.S. Central	17,480	2,031		2	_	1	_
Alabama	4,530	523	_	1	_	1	_
Kentucky	4,146	267	-	1	_	_	_
Mississippi	2,903	390	_	_	_	_	_
Tennessee	5,901	851	_	_	_		
W.S. Central	33,283 2,753	4,654	1	3	1	21	5
Arkansas Louisiana	4,516	976	_	1	_	3	4
Oklahoma	3,524	284	1	1	-	1	_
Texas	22,490	3,152	_	1	1	17	1
Mountain	19,799	1,562	-	8	2	12	2
Arizona	5,744	645	_	1	1	5	1
Colorado Idaho	4,601 1,393	364 26	=	1	_	3	_
Montana	927	20	-	_	1	-	_
Nevada	2,335	296	-	1	_	1	
New Mexico Utah	1,903 2,389	139 66	_	1 3	_	1	_
Wyoming	507	6	_	3	_	2	1
Pacific	47,611	4,962	13	45	23	81	1
Alaska	655	29	9	-	_	1	_
California	35,894	4,117	4	41	22	26	1
Hawaii	1,263	110	-	_	-	3	_
Oregon Washington	3,595 6,204	220 486	-	2 2	1	1 _	=
American Samoa	58	100		_			
C.N.M.I.	78	2	_	=	=	=	=
Guam	166	2	_	_	-	_	_
Puerto Rico	3.895	1.038	-	-	N	_	3

U: Unavailable. -: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

No cases of anthrax; diphtheria; domestic arbovial disease, western equine encephalitis virus, neuroinvasive and nonneuroinvasive, eastern equine nonneuroinvasive, and Powassen nonneuroinvasive; severe acute respiratory syndrome—associated coronavirus (SARS-CoV) disease; smallpox; or yellow fever were reported in 2005. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review. Data on human immunodeficiency virus (HIV) infections are not included because HIV infection specified because they are undergoing data quality review. Data on human immunodeficiency virus (HIV) infections are not included because HIV infection specified bottler in proposed), through December 31, 2005.

Total number of acquired immunodeficiency syndrome (AIDS) cases reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) (proposed), through December 31, 2005.

Includes cases reported as wound and unspecified botulism.

Totals reported to the Division of STD Prevention, NCHHSTP (proposed), as of May 5, 2006.

Includes 209 cases of AIDS in persons with unknown state or area of residence that were reported in 2005.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2005

Area	Chlamydia ^{††}	Cholera	Coccidioidomycosis	Cryptosporidiosis	Cyclosporiasis
United States	976,445	8	6,542	5,659	543
New England	33,772	_	_	362	58
Connecticut	11,039	mine	N	84	35
Maine	2,254	_	N	30	N
Aassachusetts	14,411	_	_	152	22
New Hampshire	1,842	-	_	38	_
Rhode Island	3,269	designer	_	19	1
/ermont	957	_	N	39	N
Mid. Atlantic	120,379	1	_	1,595	53
New Jersey	19,152		N	58	12
New York (Upstate)	25,313	1	N	1,131	20
New York City	38,653	_	N	148	21
Pennsylvania	37,261	_	N	258	N
E.N. Central	173,619	2	10	1,417	15
Itinois	50,559	_	-	158	9
ndiana	20,063	_	N	94	1
Michigan	38,730	2	10	107	2
Ohio Missonsin	43,806	_	N	561	
Visconsin	20,461	_	N	497	2
W.N. Central	58,835	1	16	589	1
owa	7,390	_	N	110	_
Kansas	7,419	_	N	40	_
Minnesota	12,189	_	15	165	-
Missouri	22,371	1	1	220	1
Nebraska	5,098	_	N	20	N
North Dakota	1,667	_	N	5	N
South Dakota	2,701	_	N	29	_
S. Atlantic	177.386	_	2	709	398
Delaware	3,392		_	6	
District of Columbia	3.678	_	_	18	1
Florida	43.372	_	N	286	374
Georgia	33,562	_	N	152	13
Maryland	18,291	_	2	33	3
North Carolina	31,183	_	N	92	2
South Carolina	18,296	_	N	24	2
Virginia	22,668	-	N	77	3
West Virginia	2,944	-	N	21	_
E.S. Central	69.812	_		228	3
Alabama	17,109	_	N	29	N
Kentucky	8,351	_	N	149	N
Mississippi	21.268		_	2	_
Tennessee	23.084	_	N	48	3
W.S. Central	111,001	2	_	249	1
Arkansas	8,507	_	-	8	_
Louisiana	17,227	2	N	83	_
Oklahoma	13,407	_	B.1	43	1
Texas	71,860	_	N	115	
Mountain	63,447	_	3,629	143	5
Arizona	21,264	_	3,516	11	_
Colorado	15,432	news.	N	50	1
Idaho	2,799	_	N	15	N
Montana	2,400	-	_	23	_
Nevada	7,321	_	66	13	N
New Mexico	8,456		19	17	4
Utah	4,602	_	23	11	-
Wyoming	1,173	_	5	3	-
Pacific	168,194	2	2,885	367	9
Alaska	4,355	_		3	_
California	130,716	_	2,885	214	N
Hawaii	5,489	2		1	_
Oregon	9,018	_	N	50	4
Washington	18,616	_		99	5
				177	
American Samoa	-	_		_	_
C.N.M.I.	207	_	_	_	_
Guam Puerto Rico	807 3.714	3	N	N	N
	3./14	_	IN	1.4	14

N: Not notifiable. U: Unavailable.

-: No reported cases.

C.N.M.I.: Commonwealth of Northern Mariana Islands.

it Totals reported to the Division of STD Prevention, NCHHSTP (proposed), as of May 5, 2006. Chlamydia refers to genital infections caused by Chlamydia trachomatis.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2005

						oviral disease				
	California	serogroup	Easter	n equine	Pow	assan	St.	Louis	Wes	t Nile
Area	Neuro- invasive	Nonneuro- invasive	Neuro- invasive	Nonneuro- invasive	Neuro- invasive	Nonneuro- invasive	Neuro- invasive	Nonneuro- invasive	Neuro- invasive	Nonneuro
nited States	73	7	21	_	1	_	7	6	1,309	1,691
ew England	_	_	11	-	_	_	_	_	9	4
onnecticut	-	_	_	-	_	_	_	_	4	2
faine	-	_	_	-	_	_	_	-	_	_
Massachusetts New Hampshire	_	=	4 7	_	_	_	_	_	4	2
Rhode Island	_	_	_	_	-	_	_	_	1	_
ermont	_	_	_	_	-	white		_	-	-
fid. Atlantic	_	_	_	*****	1	_		_	47	22
lew Jersey	-	_	-	_	_	_	_	-	3	3
lew York (Upstate)	_	_	_	_	1	_	_	_	19 11	5
lew York City rennsylvania	_	_	_	_	_	_	_	_	14	11
	17	4							259	
I.N. Central	17	1	_	_	_	_	_	_	137	156 115
ndiana	-	1	_	_	_	_	_	_	11	12
lichigan	-	_	_	-	_	_	-	_	54	8
Ohio	14	1	_	_	=	_	_	=	46 11	15 6
Visconsin		1			_			_		
V.N. Central	2	_	-	_	_	_	-	_	169	471
owa Kansas	_	=	_	=	_	=	_	=	14 17	23
Ainnesota	2	_	_	_	_	-	_	-	18	27
Aissouri	_	_	_	_		_	_		17	13
lebraska	_	=	_	_	_	=	_	_	55	133 74
lorth Dakota South Dakota	_	=	_	=	_	=	_	=	12 36	193
		3	7							
6. Atlantic Delaware	49	3	_	_	_		=	_	34	29
District of Columbia	_	_	_	-	-	_	-	-	3	2
Florida	_	-	5	-	_	_	_	_	10	11
Georgia	1	_	1	_	-	-	_	-	9	11
Maryland North Carolina	31	1	_	_	_	_	_	_	2	1 2
South Carolina	-	_	1	_	-	-	_	_	5	_
/irginia	2	2	(MARKETS)	-	_	_	-	_	_	1
West Virginia	15	_	(better)	-	describe.	_	_	_	_	_
E.S. Central	4		2	_	_	_	5	5	65	38
Alabama	1	_	2	_	-	_	_	-	6	4
Kentucky Mississippi	1	_	_	_	_	_	5	4	5 39	31
Tennessee	2	_	_	_	_	_		1	15	3
W.S. Central	1		1			_	2		275	150
Arkansas	_	_	-	_		_	_	=	13	15
Louisiana	1	_	1	-	-	_	2	_	117	54
Oklahoma	-	_	_	_	_	-	_	Manual.	17	14
Texas	-	_	-	_	-	_	_	_	128	67
Mountain	-	_	_	-	_	-	_	1	145	240
Arizona Colorado	-	_	_	_	_	=	_	1	52 21	61 85
Idaho	_	_		-	_	_	_	_	3	10
Montana	-		_	-	_	_	_	_	8	17
New Mexico	_	_	-	_	_	-	_	_	20	13
Nevada Utah		_	_	_	_	_	_	_	14 21	17 31
Wyoming	_		_		_	_	_	_	6	6
Pacific	_	_	_	_	_	_	_		306	581
Alaska	_	_	_	_	_	_	_	_	300	201
California	_	-	_	_	_	_	_	_	305	575
Hawaii	-	_	-	_	-	_	_	_	-	_
Oregon	_	_	_	_	_	_	_		1	6
Washington	_	-	-		_		_	_	_	_
American Samoa C.N.M.I.	_		_		_	_	_	_	-	-
Guam	_	_	_	_	_	_	_	_	_	_
Puerto Rico	_	_	_	_	_	_	-	_	_	-
U.S. Virgin Islands	_	1000	_	_	_		-	_	_	

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

§§ Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (NCZVED) (proposed) (ArboNET Surveillance), as of June 23, 2006.

TABLE 2. (Continued) Reported cases of notifiable diseases.* by geographic division and area — United States. 2005

		Ehrlichiosis		Enterohemorrh	agic Escheric	chia coli infection		
			Human		Shiga	toxin-positive		
Area	Human granulocytic	Human monocytic	(other & unspecified)	O157:H7	Non- 0157	Not serogrouped	Giardiasis	Gonorrhea th
United States	786	506	112	2,621	501	407	19,733	339,593
New England Connecticut Marie Massachusetts New Hampshire Rhode Island Vermont	113 30 4 62 1 16	30 2 1 19 2 6	3 1	159 43 16 59 16 9	56 20 13 15 3 —	13	1,712 400 203 724 66 132 187	6,104 2,750 142 2,537 177 438 60
Mid. Atlantic New Jersey New York (Upstate) New York City Pennsylvania	267 42 221 —	151 64 85 —	12 N 2 	324 63 144 17 100	109 8 83 — 18	30 7 10 	3,627 457 1,412 873 885	34,661 5,722 7,316 10,401 11,222
E.N. Central Illinois Indiana Michigan Ohio Wisconsin	161 2 	8 4 — 1 3	48 1 — — 47	546 102 77 85 149 133	52 10 2 13 27	45 28 — 8 8	3,310 772 N 783 817 938	72,651 20,019 8,094 17,684 20,985 5,869
W.N. Central lowa Kansas Minnesota Missouri Nebraska North Dakota South Dakota	189 N 	62 N 24 38 N	14 N 1 13 N	393 98 — 121 75 54 16 29	56 2 35 11 3 1	104 54 25 12 7 6	2,514 280 213 1,239 522 116 26 118	18,785 1,606 2,605 3,482 9,455 1,158 128 351
S. Atlantic Delaware District of Columbia Florida Georgia Maryland North Carolina South Carolina Virginia West Virginia	27 3 N 1 2 9 4 8	118 4 N 4 8 63 29 4 4	17 N 1 1 4 2 9	255 9 2 112 31 36 9 53	101 7 2 18 32 1 38 3	114 ———————————————————————————————————	2,828 58 56 987 754 210 N 106 602 55	78,928 913 2,146 20,225 15,860 7,035 15,072 8,561 8,346 770
E.S. Central Alabama Kentucky Mississippi Tennessee	6 2 1 3	21 1 4 16	5 	135 30 48 7 50	10 7 1 2	32 21 11	433 200 N 	28,117 9,406 2,935 7,171 8,605
W.S. Central Arkansas Louisiana Oklahoma Texas	22 5 N 17	115 35 N 79 1	9 2 - 7	92 13 7 35 37	19 12 2 5	58 3 1 54	349 88 64 197 N	45,386 4,476 9,572 5,228 26,110
Mountain Arizona Colorado Idaho Montana Nevada New Mexico Utah Wyoming	1 1 N N	1 N N 1	N N	236 35 75 32 16 20 12 38	89 20 7 14 — 5 13 28 2	11 1 7 3 —	1,586 183 534 155 81 113 91 398 31	13,689 4,951 3,224 119 158 2,880 1,552 7270 87
Pacific Alaska California Huwaii Oregon Washington	N - -	N - -	4 N 4	481 N 182 13 149 137	9 N N - 9		3,374 110 2,404 63 416 381	41,263 500 34,338 1,024 1,562 3,739
American Samoa C.N.M.I. Guam Puerto Rico U.S. Virgin Islands	— — N	_ _ N	 N	_ _ _ 2	= =	=	11 274	106 328 30

C.N.M.I.: Commonwealth of Northern Mariana Islands.

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Co

TABLE 2 (Continued Penertal cases of notifiable diseases * by geographic division and area — United States 2005

	Ha	emophilus influe	nzae, invasive disea	se			Hemolytic
			Age <5 yrs		Hansen	Hantavirus	uremic
Area	All ages, serotypes	Serotype b	Nonserotype b	Unknown serotype	disease (leprosy)	pulmonary syndrome	syndrome, postdiarrhea
United States	2.304	9	135	217	87	26	221
New England	176	_	12	7	7	-	10
Connecticut	55	_	6	_	1	N	5
Maine	12	_	_	3	N	_	3
Massachusetts New Hampshire	77 9	_	4	1	6	_	1
Rhode Island	14	-	2	1	_	_	1
Vermont	9			2	N	-	-
Mid. Atlantic	452	1	3	46	6	-	20
New Jersey	92	-	_	12 10	N	N	13
New York (Upstate) New York City	142 80	1	2	14	5	_	3
Pennsylvania	138	-	1	10	1	_	N
E.N. Central	377	1	10	35	2	1	20
Illinois	124	_	_	17	_	1	4
Indiana	71	-	9	2	2	=	5
Michigan Ohio	24 110	1	1	14	_	=	8
Wisconsin	48	_	_	2	name.	-	3
W.N. Central	130	_	3	16	4	3	36
Iowa	_	_	_	_	1	_	8
Kansas	18	-	_	_	_	1	17
Minnesota Missouri	53 37	_	3	3 8	1 2	_	4
Nebraska	16	_	_	4	_		2
North Dakota	6	_	_	1	N	_	
South Dakota		_		_	_	2	3
S. Atlantic	540	2	37	37	2	1	36
Delaware District of Columbia	10	-	_	1		1	_
Florida	140	1	16	5	2	_	20
Georgia	113	-	_	17	N	_	5
Maryland	78	_	7	1	_	_	6
North Carolina South Carolina	74 35	1	8	3	_	=	1
Virginia	61	_	_	9	-	-	1
West Virginia	29	_	6	1	N	_	3
E.S. Central	120	_	_	20	1	_	19
Alabama	18	_	-	3	1	N	4 N
Kentucky Mississippi	14	_	=	3		_	- 14
Tennessee	88	_		14	-	_	15
W.S. Central	127	1	11	12	25	4	19
Arkansas	7	_	1	1	1	_	2
Louisiana	38	1	2	11	1	_	5
Oklahoma Texas	74 8	_	8	_	23	4	12
		0	23	24	2	16	15
Mountain Arizona	222 105	2	13	4	1	5	3
Colorado	43	_	1	10	_	8	10
Idaho	5	-	_	2		_	2
Montana Nevada	15		2	3	1	1	_
New Mexico	32	1	5	2	_	1	-
Utah	13	_	2	2	-	_	_
Wyoming	9	-	-	1	_	1	_
Pacific	160	2	36	20	38	1	46
Alaska California	27 65	2	36	7	16	N	N 36
Hawaii	9	_	-	_	22	_	-
Oregon	54 5	_	_	6	N		6 4
Washington American Samoa	5	_		_	-	_	4
C.N.M.I.	_	_	_	_	-	_	_
Guam	15	main	-	-	2	_	-
Puerto Rico U.S. Virgin Islands	4	_	-	2	2	_	-

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2005

	Me	patitis, viral, acu	ite	Influenza- associated				
Area	A	B	С	pediatric mortality***	Legionellosis	Listeriosis	Lyme	Malaria
United States	4,488	5,119	652	45	2,301	896	23,305	1,494
New England	452	158	27	3	158	61	4.751	86
Connecticut	51	50	10	_	35	20	1,810	24
Vlaine	8	14	_	N	7	3	247	5
Massachusetts	287	54	_	1	66	19	2,336	39
New Hampshire	82	29	-	N	9 31	9	265	6
Rhode Island Vermont	19 5	5 6	17	2	10	8 2	39 54	10 2
Mid. Atlantic	629 154	677 239	100 16	15 2	763 121	213 37	13,215 3,363	367 79
New Jersey New York (Upstate)	112	101	21	2	240	68	5,165	61
New York City	278	132	_	5	119	44	400	190
Pennsylvania	85	205	63	6	283	64	4,287	37
E.N. Central	356	566	141	3	461	118	1,739	154
Illinois	130	157	3		66	32	127	74
Indiana	23	57	25	N	33	9	33	10
Michigan	105	169	104	1	120	26	62	24
Ohio	51	136	9	2	206	36	58	30
Wisconsin	47	47	_	_	36	15	1,459	16
W.N. Central	117	206	32	2	104	45	1,031	79
lowa	22	31	_	1	8	7	89	9
Kansas	17	32	_	N	4	7	3	7
Minnesota	33	42	15	1	34	15	917	41
Missouri	26	76	13	_	30	6	15	18
Nebraska	16	17	3	N	4	6	2	3
North Dakota South Dakota	2	-8	1	14	21	4	2	1
				7		400		
S. Atlantic	713	1,414 37	81	/	435 19	183	2,343 646	329
Delaware District of Columbia	6	13	_	N	14	3	10	11
Florida	274	487	13	N	119	62	47	68
Georgia	124	202	9	4	39	25	6	50
Maryland	82	160	5	1	112	19	1,235	99
North Carolina	84	167	21		36	34	49	40
South Carolina	40	133	1	_	14	15	15	11
Virginia	93	146	13	2	55	17	274	44
West Virginia	4	69	19	N	27	8	61	
E.S. Central	232	368	74	1	88	30	16	30
Alabama	44	90	14	_	13	9	3	6
Kentucky	24	67	16	1	33	5	5	10
Mississippi Tennessee	19 145	53 158	17 27	N	39	11	8	14
W.S. Central	552	944	119		78	60	72	153 6
Arkansas Louisiana	20 65	72 69	2	N	9	15	3	5
Oklahoma	6	61	14	_	10	4	_	12
Texas	461	742	102	N	55	39	69	130
Mountain	344	196	40	4	96	29	23	61
Arizona	195	U	40	1	26	13	10	21
Colorado	48	61	21	2	20	6	_	24
Idaho	20	14	1	_	4	_	2	-
Montana	10	10	1	_	6	-	_	-
Nevada	21	48	10	1	17	2	3	4
New Mexico	28	20	1	_	4	4	3	3 7
Utah Wyoming	21	40	6	_	15	4	2	2
			_			407		
Pacific	1,093	590	38	10	118	157	115	235
Alaska California	4 971	8 412	24	N 10	83	N 132	95	177
Hawaii	24	10	1	-	3	2	-	18
Oregon	46	95	13	N	14	11	3	12
Washington	48	65	Ü	N	17	12	. 13	21
American Samoa	1	_			_	_	_	_
C.N.M.I.	_	_	_	_		_	_	_
Guam	2	18	8	_	_	_	_	-
Puerto Rico	68	63	_	N	1	1	_	4
U.S. Virgin Islands			_	-	_	_	-	-

N: Not notifiable.

U: Unavailable.

^{-:} No reported cases.

C.N.M.I.: Commonwealth of Northern Mariana Islands.

^{***} Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD) (proposed), as of December 31, 2005.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2005

				Men	ingococcal disea	ise, invasive	
Area	Meas Indigenous	Imported***	All serogroups	Serogroup A, C, Y, & W-135	Serogroup B	Other serogroup	Serogroup unknown
Inited States	42	24	1,245	297	156	27	765
iew England	_	1	70	32	12	2	24
Connecticut	-	_	15	11	3	_	1
faine	anne.	_	2		_	-	2
lassachusetts	-	7	32	18	6	1	7
lew Hampshire	_	1	12	1	3	_	12
Rhode Island /ermont	_	_	5	2	_	1	2
Aid. Atlantic	3	6	166	25	13	1	127
lew Jersey	1	1	32	-	_	_	32
lew York (Upstate)	-	1	49	19	11	readon.	19
New York City	2	4	28	_	_	_	28
Pennsylvania	_	_	57	6	2	1	48
E.N. Central	36	5	159	21	10	3	125
llinois	1	1	34	7	_	=	34
ndiana Michigan	32	1	19 35	10	4	3	18
Ohio	2	1	45	4	2		39
Visconsin	1	1	26	_	_	_	26
W.N. Central	_	_	86	32	16	2	36
owa	-	-	18	10	7	_	1
Kansas	_	_	11		_	1	11
Minnesota	_	-	17 28	5 10	5 4	1	6 13
Missouri Nebraska	_		6	3	_	_	3
North Dakota	_	_	2	_		_	2
South Dakota	_	-	4	4	-	_	_
S. Atlantic	_	1	222	83	34	1	104
Delaware	-	1	4	7	-	_	4
District of Columbia	_	_	5 84	1 38	9	_	4 37
Florida Georgia	_	_	18	30	-	_	18
Maryland		_	22	9	7	1	5
North Carolina	_	_	32	14	9	_	9
South Carolina	_	_	14 35	3 12	2 7	_	9 16
Virginia West Virginia	-	_	8	6	_	_	2
E.S. Central		1	61	7	6	-	48
Alabama	_		6	2	1	_	3
Kentucky	_	_	20	_	_	_	20
Mississippi	-	7	7	_		_	7
Tennessee	_	1	28	5	5	_	18
W.S. Central	_	3	129	50	37	7	35
Arkansas	_	_	18	8	5 7	_	5 9
Louisiana Oklahoma		_	32 18	16 6	4	6	2
Texas	_	3	61	20	21	1	19
Mountain	_	1	90	40	16	9	25
Arizona	_	1	34	16	5	2	11
Colorado	-	_	18	8	5	5	_
Idaho	-	-	7	1	_	_	6
Montana Nevada	_	_	14	7	4	1	2
New Mexico	_	_	5	1	_	_	4
Utah	_	_	12	7	2	1	2
Wyoming	_	-	-	_	_	_	-
Pacific	3	6	262	7	12	2	241
Alaska	_	_	4	_	_	-	4
California	2	2	157	2	1	2	157 7
Hawaii Oregon	1	2	12 55	_	_	_	55
Washington	_	2	34	5	11	_	18
American Samoa	_	_	1	_	_	_	1
C.N.M.I.	_	_	-		_		_
Guam	_	_	1	_	_	_	1
Puerto Rico U.S. Virgin Islands	-		7	_	_	_	7

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

111 Imported cases include only those directly related to importation from other countries.

TABLE 2. (Continued) Reported cases of notifiable diseases.* by geographic division and area — United States. 2005

				Poliomyelitis,			Rabies		
Area	Mumps	Pertussis	Plague	paralytic ⁵⁵⁵	Psittacosis	Q Fever	Animal	Human	
Inited States	314	25,616	8	1	16	136	5,915	2	
ew England	11	1.636	_	_	_	8	700	_	
Connecticut	1	85	_	_	N	_	210	_	
faine	2	56	_	_	-	3	61	_	
Massachusetts	7	1,167	-	_	_	5	329	_	
lew Hampshire	1	186	_	_	-	_	13	_	
Rhode Island	_	53	-	_	_	8.1	29 58	_	
/ermont	- Calabra	90	_	_	-	N		_	
Mid. Atlantic	64	1,473	-	_	3	5	999	-	
New Jersey	9	192	_	-	_	_	N	_	
New York (Upstate)	32	656 111	_	=	2	1	565 28	_	
New York City Pennsylvania	15 8	514	_	_	1	3	406	_	
E.N. Central	48	3,913 922	_	_	1	25 11	201 51	_	
Ilinois ndiana	10	396	_	=	_	4	12	_	
Michigan	24	321	_		_	2	40	_	
Ohio	8	1,185	_	_	1	3	70	_	
Visconsin	5	1,089	-	-	_	5	28	_	
W.N. Central	19	4,521	_	_	1	17	436	-	
w.n. Centrai Iowa	6	1,106	_	_	1	N	108	_	
Kansas	-	542	_	_	-		80	20000	
Minnesota	6	1,571	-	_	_	-	71	_	
Missouri	4	656	_	_	-	13	73	-	
Nebraska	_	295	-	_	_	2	-	_	
North Dakota	3	168	_	_	_	2	36 68	_	
South Dakota	-	183		_				_	
S. Atlantic	36	1,450	_	_	6	11	2,087	_	
Delaware		16	_	_	1	_	-	_	
District of Columbia	8	11 208	_	=		1	201		
Florida Georgia	2	48	_	_	_	_	256	_	
Maryland	10	219	_	-	4	1	380	_	
North Carolina	13	127	-	_	1	6	459	_	
South Carolina	1	405	_	_	-	1	225	-	
Virginia	2	363	-	_	_	2	495	_	
West Virginia	-	53	_	_	_	N	71	_	
E.S. Central	10	516	_	1000	1	5	149	1	
Alabama	6	82	N	_	1	_	79	_	
Kentucky	_	155	-	_	_	2	17	_	
Mississippi	1	62	_	_	-	1	5 48	1	
Tennessee	3	217	-	_	_	2		_	
W.S. Central	37	2,723	_	_	_	9	856	-	
Arkansas	2	321	_	_	_		36	_	
Louisiana	8	51		_	_	N	79	_	
Oklahoma	2 25	127 2,224	_		N	3	741	_	
Texas			_	_					
Mountain	20	4,214	7	1	1	36	270	-	
Arizona	1	1,108	_	1	_	2 25	169 18	_	
Colorado	6	1,383 220	3	_	1	23	12	_	
Idaho Montana	1	586	-			_	15	_	
Nevada	3	50	_	_	_	2	14	_	
New Mexico	_	196	4	_	_	4	10	_	
Utah	7	618	_	_	_	_	15	_	
Wyoming	2	53	_	-		3	17	_	
Pacific	69	5.170	1	_	3	20	217	1	
Alaska	1	159	_	_	-	N	4	_	
California	47	3,182	1	_	1	16	205	1	
Hawaii	18	163	_		_	_	_	_	
Oregon	N	619	_	_	1	2 2	8 U	_	
Washington	3	1,047	_	_	1	2	U		
American Samoa	_	_	_	_	-	_	_	_	
C.N.M.I.	_	_	-	_	_	_	_	_	
Guam	3	2	_	_	_	_	71	_	
Puerto Rico	3	6	_	-	_	_	/ 1	_	

C.N.M.I.: Commonwealth of Northern Mariana Islands.

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Co. 555 Case of vaccine-associated paralytic poliomyelitis (VAPP) caused by polio vaccine virus.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2005

Area	Rocky Mountain spotted fever	Rubella	Rubella, congenital syndrome	y geographic divi	Shigellosis	Streptococcal disease, invasive, group A	Streptococcal toxic-shock syndrome
United States	1,936	11	1	45.322	16,168	4,715	129
New England Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont	10 N 6 1	3 - 1 2 -	1 = - 1 -	2,158 468 164 1,144 177 112 93	323 58 15 192 19 23 16	283 100 14 128 18 12 11	21 19 N —
Mid. Atlantic New Jersey New York (Upstate) New York City Pennsylvania	71 30 2 7 32	2 1 1	= =	5,253 960 1,427 1,196 1,670	1,293 318 329 416 230	895 179 276 171 269	7 - - 7
E.N. Central Illinois Indiana Michigan Ohio Wisconsin	41 11 1 6 21 2	1 1 1	= = = = = = = = = = = = = = = = = = = =	5,743 1,837 680 952 1,338 936	1,205 409 191 241 139 225	909 307 110 208 192 92	61 35 6 3 17
W.N. Central lowa Kansas Minnesota Missouri Nebraska North Dakota South Dakota	154 7 5 2 128 6 1	= = = = = = = = = = = = = = = = = = = =		2,618 410 369 573 801 219 86 160	1,785 103 272 96 1,017 160 6	306 40 122 73 27 18 26	7 1 2 3 - 1
S. Atlantic Delaware District of Columbia Florida Georgia Maryland North Carolina South Carolina Virginia West Virginia	1,010 7 2 14 86 75 625 70 121	1		13,016 126 60 5,552 1,929 806 1,712 1,444 1,172 215	2,514 11 15 1,270 672 103 202 105 134 2	959 6 13 260 203 178 124 38 110 27	14 N N 8
E.S. Central Alabama Kentucky Mississippi Tennessee	229 72 3 18 136	1 -	=======================================	2,966 739 488 904 835	1,200 225 335 102 538	180 N 35 	4 N 4
W.S. Central Arkansas Louisiana Oklahoma Texas	379 137 6 206 30	= =	= = =	5,240 739 908 448 3,145	4,236 62 137 937 3,100	396 23 N 132 241	 N
Mountain Arizona Colorado Idaho Montana Nevada New Mexico Utah Wyoming	40 25 4 3 1 4			2,470 746 582 150 146 200 251 310 85	993 547 170 19 5 64 137 46	659 303 182 5 N 95 69	14 6
Pacific Alaska California Hawaii Oregon Washington	2 N — 2	3 1 1 1	=	5,858 60 4,546 290 410 552	2,619 13 2,278 35 126 167	128 N N 128 N	1 N N 1 N
American Samoa C.N.M.I. Guam Puerto Rico U.S. Virgin Islands	 N	=	=======================================	7 46 690	7 20 9	= =	

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2005

	Streptococcus invasive	pneumoniae,	notiliable disea	Syphilis	raphic division		United States, 2	
	Drug resistant,			Congenital	Primary and		Toxic-shock	
Area	all ages	Age <5 yrs	All stages****	(age <1 yr)	secondary	Tetanus	syndrome	Trichinellosis
United States	2,996	1,495	33,278	329	8,724	27	90	16
New England	255	123	668	1	225	_	5	2
Connecticut Maine	106 N	43	1 6 6	1	58	_	N	-
Massachusetts		55	398	_	1 125	_	N 1	_
New Hampshire	-	11	33	_	16	_	2	1
Rhode Island Vermont	29 13	8	64	-	24	-	1	1
		6	1		1	_	1	-
Mid. Atlantic New Jersey	215	190 44	5,376 813	25	1,037	5	21	2
New York (Upsta	ate) 88	81	667	16 7	133	1 4	5	_
New York City	_	32	3,184	1	616	-	5 2	_
Pennsylvania	127	33	712	1	199	_	9	2
E.N. Central	645	356	3,024	46	944	3	19	4
Illinois Indiana	39 199	102 74	1,608	23	525	1	5	1
Michigan	50	61	288 488	2 17	62 105	1	1 9	_
Ohio	357	82	502	2	211	1	4	2
Wisconsin	_	37	138	2	41	_	_	_
W.N. Central	236	122	717	4	252	3	15	1
lowa Kansas	_	45	28		9	1	5	1
Minnesota	191	15 80	88 206	1	19 70	_	_	-
Missouri	37	10	372	3	147	2	9	_
Nebraska	2	8	18	-	4	_	_	_
North Dakota South Dakota	3	9	1 4	-	1	-	_	_
		_			2	_	1	_
S. Atlantic Delaware	1,160	342	8,151	50	2,311	5	7	2
District of Colum		3	35 365	_	11 114	-	_	_
Florida	614	79	2,888	16	724	3	N	1
Georgia	389	107	1,924	1	645	_	2	Ň
Maryland North Carolina	6 N	66 N	1,005 712	16	313	1	N	-
South Carolina		24	549	10	274 84	_	4	_
Virginia	N	34	655	3	143	1	1	1
West Virginia	132	28	18	_	3	-	_	_
E.S. Central	199	20	1,967	8	487	1	2	_
Alabama Kentucky	N 32	N	551	5	169	_	1	_
Mississippi	1	20	129 371	_	52 49	1	-	N
Tennessee	166	N	916	3	217	=	1	_
W.S. Central	233	248	5.914	84	1,247		1	
Arkansas	14	23	231	7	52	_	1	_
Louisiana Oklahoma	107	36	1,237	11	278	_	N	_
Texas	112	46 143	159 4,287	65	44 873	_	N	-
Mountain	53	85	1,574	36		_		_
Arizona	Ü	Ü	792	28	423 175	2	14	_
Colorado	N	52	144	1	46	i	6	-
Idaho Montana	N 1	_	54	_	20	_	2	-
Nevada	N	N	7 343	1	109	_	3	_
New Mexico	_	33	183	6	56	_	_	_
Utah	26		50	_	10	_	2	_
Wyoming	26	_	1		-	_	_	_
Pacific	A1	9	5,887	75	1,798	8	6	5
Alaska California	N	N	5,340	75	1 505	7	N	3
Hawaii	-	3	5,340	75	1,585	_	6	2
Oregon	N	6	109	_	41	_	N	_
Washington	N	N	359	_	152	1	N	-
American Samo	a –	_	-	_	_	-	-	_
C.N.M.I. Guam	_	4	19	-	_	_	-	_
Puerto Rico	N	Ñ	1,223	11	2 226	3	N	=
U.S. Virgin Islan		-	13	-	1	_	_	_

N: Not notifiable. U: Unavailable.

^{-:} No reported cases.

C.N.M.I.: Commonwealth of Northern Mariana Islands.

^{18.} Not inclinate: Use the Division of STD Prevention, NCHHSTP (proposed), as of May 5, 2006.

**** Includes the following categories: primary, secondary, latent (including early latent, late latent, and latent syphilis of unknown duration), neurosyphilis, late (including late syphilis with clinical manifestations other than neurosyphilis), and congenital syphilis.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2005

Area	Tuberculosis****	Tularemia	Typhoid fever	Vancomycin- intermediate Staphylococcus aureus	Vancomycin- resistant Staphylococcus aureus	Varicella (chickenpox)	Varicella deaths5555
United States	14,097	154	324	2	3	32,242	3
New England	436	12	23	_	_	5,284	_
Connecticut Maine	95 17	_	8	N	Autor Autor	1,709 331	_
Massachusetts	265	12	13	14		2.214	_
lew Hampshire	4	4000	-	-	-	337	_
thode Island	47	-	1	-	-	N	_
fermont	8	_	-	_	-	693	_
lid. Atlantic	2,099	4	62	1	_	4,752	_
lew Jersey	485	_	12	_	-	N	-
lew York (Upstate) lew York City	305 984	2	8 33	N	_	N	_
ennsylvania	325	2	9	1	_	4,752	_
					0		
.N. Central linois	1,326 596	6	39 23	_	3	6,239 106	1
ndiana	146	2	2	_		N	
flichigan	246	2	6	-	3	3,916	_
Ohio	260	1	2	arises.	-	1,725	_
Visconsin	78	-	6	N	N	492	_
V.N. Central	479	48	7	_	_	695	
owa	55	_	_	_	-	N	_
lansas	60	5	1	N	N	_	_
Ainnesota Aiscouri	199	27	6	_	_	477	_
Aissouri Vebraska	108 35	8	_	_		N N	_
Iorth Dakota	6	_	_		-	82	
South Dakota	16	8	-	_		136	
6. Atlantic	2,937	2	60	1	_	3.729	2
Delaware	26	-	1	_	_	35	_
District of Columbia	56	-	-	N	N	43	MODEL .
Florida	1,094	1	11	-	_	N	1
Georgia	505		9	1	**	N	*****
Naryland North Carolina	283 329	_	13	N	N	N	_
South Carolina	261	1	_		_	674	_
/irginia	355	_	20	-	_	1.834	1
West Virginia	28		-	_	-	1,143	_
E.S. Central	741	13	7	and the same of th	-	306	_
Alabama	216	1	1	N	-	306	_
Kentucky	124	3	2	N	N	N	_
Mississippi	103 298	_	2		-	-	-
Tennessee		9	2	-	_	N	-
W.S. Central	2,050	40	32	and the same of	-	8,624	_
Arkansas	114 257	19	1	_	***	159	
Louisiana Oklahoma	144	20	1		_	129	-
Texas	1,535	1	30	-	_	8.336	_
Mountain	595	14	14			2.613	
Arizona	281	2	4		_	2,613 U	_
Colorado	101	5	7	-	_	1,797	_
daho	23	-	-	_	-	N	=
Montana	10	2	_	-			_
Nevada New Mexico	112 39	2	1	N N	N	N 212	_
Utah	29	1	1	14	-	551	=
Wyoming		2	_	_	-	53	_
Pacific	3,434	15	80	_			_
Alaska	59	1	-	N	N	N	_
California	2,904	3	53	N	N	N	_
Hawaii	112	_	12	_	_	_	_
Oregon Washington	103	2	4	N	N	N	_
Washington	256	9	11	N	N	N	-
American Samoa	5		1	_	_	_	_
C.N.M.I.	56	-		-	_	445	-
Guam Puerto Rico	64 113		1	N	_	445 762	_
U.S. Virgin Islands	110					102	_

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

1111 Totals reported to the Division of TB Elimination, NCHHSTP (proposed), as of May 12, 2006.

9559 Death counts provided by the Division of Viral Diseases, National Center for Immunization and Respiratory Diseases (proposed), as of December 31, 2005.

TABLE 3. Reported cases and incidence* of notifiable diseases,† by age group — United States, 2005

	<	1 yr	1-4	yrs	5-1	4 yrs	15-	24 yrs	25-	39 yrs	40-6	64 yrs	>65	yrs	Age no	ot
Disease	No.	Rate		Rate	No.	Rate		Rate	No.	Rate	e No.	Rate	No.	Rate	-	Total
AIDS [§]	36	0.9	25	0.2	100	0.2	2.299	5.5	16.736	27.4	21,117	22.5	807	2.2		41,120
Botulism								-				66.0	001	40.00		41,120
foodborne	_	0	1	0	1	0	4	0	4	0	3	0	5	0	1	19
infant	81	2.0	_	0	_	0	_	0	_	0	_	0	-	0	4	85
other (wound & unspecified)	4	0.1	_	0		0	_	0	8	0	18	0	1	0	-	31
Brucellosis	2	0	4	0	15	0	17	0	31	0.1	36	0	14	0	1	120
Chlamydia 1.**	_	0	-	0	_	0	693.239	1.662.4	235.447	385.4	26.553	28.3	880	2.4		976.445
Cholera	_	0	_	0		0	_	0	2	0	5	0	1	0	-,550	8
Coccidioidomycosis††	19	1.2	53	0.8	330	2.0	636	3.8	1.393	5.7	2.672	7.3	1,330	9.7	109	6.542
Cryptosporidiosis	127	3.1	1.248	7.8	1.347	3.3	542	1.3	1,114	1.8	952	1.0	271	0.7	58	5,659
Cyclosporiasis		0	5	0	10	0	24	0.1	99	0.2	297	0.4	106	0.4	2	543
Domestic arboviral diseases		0	9		10	0	24	0.1	33	0.2	231	0.4	100	0.4	2	343
California serogroup																
neuroinvasive	_	0	16	0.1	44	0.1	4	0	1	0	2	0	6	0	_	73
nonneuroinvasive	-	0	1	0	2	0	2	0	_	0	2	0	U	0	_	7
eastern equine, neuroinvasive	1	0	3	0	2	0	2	0	1	0	7	0	5	0	_	21
Powassan, neuroinvasive		0	_	0	_	0		0		0	,	0	1	0		1
St. Louis		O		0		0				O		0	1	U	_	
neuroinvasive		0		0		0		0	2	0	2	0	3	0		7
nonneuroinvasive	-	0		0		0	1	0	_	0	5	0	3	0		6
West Nile		O		U		0	,	U		O	3	U	_	U	_	
neuroinvasive	2	0	6	0	23	0.1	61	0.1	142	0.2	565	0.6	469	1.3	41	1,309
nonneuroinvasive	1	0	5	0	26	0.1	119	0.3	269	0.4	873	0.9	267	0.7	131	1,691
Ehrlichiosis	,	V	0	U	20	0.1	113	0.0	203	0.4	0/3	0.5	201	0.7	131	1,051
human granulocytic	_	0	3	0	36	0.1	37	0.1	100	0.2	383	0.4	224	0.7	3	786
human monocytic		0	8	0.1	28	0.1	37	0.1	77	0.1	239	0.3	114	0.3	3	506
human (other & unspecified)	_	0	4	0	4	0	6	0.1	18	0.1	54	0.3	26	0.1	_	112
Enterohemorrhagic		U	**	U	4	U	0	U	10	U	34	0.1	20	0,1	_	112
Escherichia coli infection																
O157:H7	37	0.9	530	3.3	645	1.6	411	1.0	285	0.5	440	0.5	232	0.6	41	2,621
Shiga toxin-positive	31	0.5	550	3.3	045	1.0	411	1.0	200	0.5	440	0.5	232	0.0	41	2,02
non-O157	14	0.4	114	0.8	84	0.2	78	0.2	66	0.1	89	0.1	43	0.1	13	501
not serogrouped	19	0.4	100	0.7	72	0.2	59	0.2		0.1	68	0.1	36	0.1	5	40
Giardiasis	298	8.7	3.919	29.0	3.568	10.3	1,606	4.5		7.3	5.013	6.2	1.114	3.5	407	
Gonorrhea**	290	0	3,919	0	3,500	0	196,177		106.654		29,606	31.6	759	2.1	1,717	19,73
Haemophilus influenzae.	_	U		U	_	U	190,177	470.4	100,034	174.0	29,000	31.0	759	2.1	1,/1/	339,39
invasive disease																
		0		0	93	0.0	01	0.2	155	0.3	EGE	0.6	1 025	2.0	275	2 20
all ages, serotypes	_	U	_	U	93	0.2	81	0.2	155	0.3	565	0.6	1.035	2.9	375	2,30
age <5 yrs		0.1	-	0		0		C		0		0		0		
serotype b	4	0.1	5	0	_	0	_	0	_	0	_	0	_	0	-	42
nonserotype b	78	1.9	57	0.4	_	0	_		_	0	-	0	_	0	-	13
unknown serotype	122	3.0	95	0.6	_	0	-	0	-	0		0	_	0	-	21
Hansen disease (leprosy)	_	0		0	3	0	12	0	15	0	24	0	9	0	24	8

^{*} Per 100,000 population.

No cases of anthrax; diphtheria; domestic arbovial disease, western equine encephalitis virus, neuroinvasive and nonneuroinvasive, eastern equine nonneuroinvasive, and Powassen nonneuroinvasive; severe acute respiratory syndrome—associated coronavirus (SARS-CoV) disease; smallpox; or yellow fever were reported in 2005. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review. Data on human immunodeficiency virus (HIV) infections are not included because HIV infection reporting has been implemented on different dates and using different methods than for acquired immunodeficiency syndrome (AIDS) case reporting.

[§] Total number of AIDS cases reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) (proposed), through December 31, 2005.

Chlamydia refers to genital infections caused by Chlamydia trachomatis.

^{**} Age-related data are collected on aggregate forms different from those used for the number of reported cases. Thus, the total number of cases reported here will differ slightly from other tables. Cases among persons aged <15 years are not shown because some might not be caused by sexual transmission; these cases are included in the totals. Totals reported to the Division of STD Prevention, NCHHSTP (proposed), as of May 5, 2006.

^{††} Notifiable in <40 states.

TABLE 3. (Continued) Reported cases and incidence* of notifiable diseases,† by age group — United States, 2005

	<	l yr	1-4	yrs	5-1	4 yrs	15-2	24 yrs	yrs 25-3	39 yrs	40-0	64 yrs	>65	yrs	Age not	1
Disease	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	stated	
Hantavirus pulmonary syndrome	_	0		0	2	0	6	0	7	0	8	0	3	0		25
Hemolytic uremic syndrome,																
postdiarrheal	7	0.2	108	0.7	65	02	10	0	6	0	9	0	12	0	4	221
Hepatitis, viral, acute			-													
A	14	0.3	194	12	693	1.7	742	1.8	1.003	1.6	1,304	1.4	492	1.4	46	4,488
В	3	0.1	2	0	11	0	514	1.3	2.099	3.5	2.073	23	219	0.6	198	5,119
C	3	0.1	3	0	-	0	113	0.3	248	0.4	255	0.3	19	0.1	11	652
Influenza-associated	-															
pediatric mortality§§	9	0.3	12	0.1	18	0.1	6	0	-	0	-	0		0	-	45
Legionellosis	3	0.1	2	0	13	0	25	0.1	180	0.3	1,177	1.3	884	24	17	2,301
Listeriosis	73	1.8	7	0	9	0	35	0.1	71	0.1	213	0.2	483	1.3	5	896
Lymedisease	47	12	1,041	6.5	4,307	10.6	2.280	5.5	2.945	4.8	9.096	9.7	3,105	8.6	484	23,305
Malaria	11	0.3	57	0.4	154	0.4	227	0.5	442	0.7	499	0.5	67	02	37	1,494
Measles	6	0.1	4	0	21	0.1	12	0	9	0	10	0	2	0	2	86
Meningococcal disease, invasive	-	-				-										
all serogroups	151	3.7	160	1.0	140	0.3	261	0.6	128	02	228	02	171	0.5	6	1,245
serogroup A, C, Y, & W-135	18	0.4	21	0.1	31	0.1	62	0.1	43	0.1	66	0.1	56	02		297
serogroup B	31	0.8	31	0.2	20	0	35	0.1	8	0	19	0	10	0	2	196
other serogroup	8	0.2	7	0	1	0	1	0	4	0	5	0	1	0	_	27
serogroup unknown	94	23	101	0.6	88	02	163	0.4	73	0.1	138	0.1	104	0.3	4	765
Mumps	1	0	50	0.3	75	02	67	0.2	60	0.1	49	0.1	10	0	2	314
Pertussis	3.957	97.1	2.497	15.6	7,028	172	3.944	9.5	2.481	4.1	3.765	40	573	1.6	1,371	25,616
Plaque	0,007	0	1	0	1,000	0	1	0	2,401	0	5	0	1	0	1,071	8
Poliomyelitis, paralytic		0	_	0		0	1	0	-	0	_	0	_	0		1
Psittacosis		0	_	0	_	0	3	0	3	0	8	0	1	0	1	16
Ofever		0		0	5	0	8	0	22	0	74	0.1	27	0.1	_	136
Rabies		v		v	2	U	0	0	6din	U	1-4	0.1	L	0.1		100
human		0		0	1	0	1	0	_	0	_	0		0		2
Rocky Mountain spotted fever	3	0.1	29	0.2	263	06	207	0.5	416	0.7	780	0.8	229	0.6	9	1.936
Rubella	1	0	0	0	1	0.6	1	0.5	2	0	5	0.6	_	0	1	11
Rubella, congenital syndrome	1	0	_	0	-1	0	-	0	_	0	2	0	-	0		1
Salmonellosis	4,805	117.9	8,160	51.0	6,566	16.1	4.298	10.3	6.227	102	9.385	10.0	4.845	13.3	1,036	45.322
Shigellosis	299	7.3	4.667	292	5,266	129	1,136	2.7	2260	3.7	1,791	19	400	1.1	349	16,168
	200	13	4,007	232	5,200	129	1,130	21	2,200	3.7	1,791	19	400	1.1	349	10,100
Streptococcal disease,	114	3.5	235	1.8	297	0.9	162	0.5	614	13	1,658	22	1,490	5.0	145	4,715
invasive, group A Streptococcal toxic-shock syndrome		0	4	0	7	0.9	12	0.5	19	0	57	0.1	30	0.1	140	125
Streptococcus pneumoniae,	_	U	*	U	,	u	12	U	19	U	2/	U.I	30	U.I	_	16
invasive disease ^{††}																
drug resistant, all ages	121	42	213	1.9	112	0.4	51	0.2	244	0.6	1,038	1.5	1,097	4.1	120	2,996
age <5 yrs	449	124	1,046	7.4	-	0	_	0		0	-	0	-	0	-	1,496
Syphilis, primary & secondary**	-	0	_	0	_	0	1,623	3.9	4,114	6.7	2,912	3.1	59	0.2	5	8,724
Tetanus	_	0	-	0	1	0	3	0	2	0	12	0	9	0	-	2
Toxic-shock syndrome	1	0	2	0	9	0	32	0.1	19	0	25	0	-	0	2	90
Trichinellosis	-	0	-	0	2	0	2	0	3	0	8	0	1	0	-	16
Tuberculosis 199	81	2.0	399	25	383	0.9	1,542	3.7	3,499	5.7	5,377	5.7	2,816	7.8	****	14,097
Tularemia	-	0	16	0.1	20	0	18	0	15	0	58	0.1	25	0.1	2	15
Typhoidfever	6	0.1	26	02	76	02	60	0.1	97	02	42	0	9	0	8	32
Vancomycin-intermediate																
Staphylococcus aureus Vancomycin-resistant	-	0	-	0	-	0	-	0	-	0	10000	0	2	0	-	;
Staphylococcus aureus	_	0	_	0	_	0	_	0	_	0	2	0	1	0		

^{§§} Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD) (proposed), as of December 31, 2005.
11 Totals reported to the Division of TB Elimination, NCHHSTP (proposed), as of May 12, 2006.

TABLE 4. Reported cases and incidence* of notifiable diseases,† by sex — United States, 2005

	M	ale	Fer	nale	Sex not stated	
Disease	No.	Rate	No.	Rate	No.	Total
AIDS [§]	30,414	21.0	10,706	7.2		41,120
Botulism						
foodborne	9	0	10	0		19
infant	45	2.2	38	1.9	2	85
other (wound & unspecified)	23	0	8	0		31
Brucellosis	67	0	52	0	1	120
Chancroid®	11	0	5	0	1	17
Chlamydia 1.**	232.781	161.1	740,371	496.5	3.293	976,445
Cholera	4	0	4	0	_	8
Coccidioidomycosis††	3.762	7.3	2.577	4.9	203	6,542
Cryptosporidiosis	2,882	2.0	2,736	1.8	41	5,659
Cyclosporiasis	241	0.2	301	0.3	1	543
Domestic arboviral diseases					·	
California serogroup						
neuroinvasive	39	0	33	0	1	73
nonneuroinvasive	4	0	3	0	_	7
eastern equine, neuroinvasive	13	0	8	0	_	21
Powassan. neuroinvasive	1	0	_	0	_	1
St. Louis	,	O		0		
neuroinvasive	3	0	3	0	1	7
nonneuroinvasive	3	0	3	0		6
West Nile	3	0	3	U	_	0
neuroinvasive	749	0.5	555	0.4	5	1.309
	945	0.7	740	0.5	6	1,691
nonneuroinvasive	945	0.7	740	0.5	O	1,091
Ehrlichiosis	450	0.0	204	0.0	0	700
human granulocytic	456	0.3	324	0.2	6	786
human monocytic	271	0.2	232	0.2	3	506
human (other & unspecified)	62	0	50	0	_	112
Enterohemorrhagic						
Escherichia coli infection						
O157:H7	1,181	0.8	1,414	1.0	26	2,621
Shiga toxin-positive						
non-O157	252	0.2	240	0.2	9	501
not serogrouped	199	0.2	206	0.2	2	407
Giardiasis	10,739	8.7	8,653	6.7	341	19,733
Gonorrhea	161,117	111.5	177,537	119.1	939	339,593
Haemophilus influenzae,						
invasive disease						
all ages, serotypes	1,071	0.7	1,225	0.8	8	2,304
age <5 yrs						
serotype b	4	0	4	0	1	
nonserotype b	78	0.8	57	0.6		139
unknown serotype	128	1.2	88	0.9	1	217

^{*} Per 100,000 population.

No cases of anthrax; diphtheria; domestic arbovial disease, western equine encephalitis virus, neuroinvasive and nonneuroinvasive, eastern equine nonneuroinvasive, and Powassen nonneuroinvasive; severe acute respiratory syndrome—associated coronavirus (SARS-CoV) disease; smallpox; or yellow fever were reported in 2005. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review. Data on human immunodeficiency virus (HIV) infections are not included because HIV infection reporting has been implemented on different dates and using different methods than for acquired immunodeficiency syndrome (AIDS) case reporting.

[§] Total number of AIDS cases reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) (proposed), through December 31, 2005.

¹ Totals reported to the Division of STD Prevention, NCHHSTP (proposed), as of May 5, 2006.

^{**} Chlamydia refers to genital infections caused by Chlamydia trachomatis.

^{††} Notifiable in <40 states.

TABLE 4. (Continued) Reported cases and incidence* of notifiable diseases,† by sex — United States, 2005

	Ma	ale	Fen	nale	Sex not stated	
Disease	No.	Rate	No.	Rate	No.	Total
Hansen disease (leprosy)	38	0	26	0	23	87
Hantavirus pulmonary syndrome	19	0	7	0	-	26
Hemolytic uremic syndrome, postdiarrheal	94	0.1	126	0.1	1	221
Hepatitis, viral, acute						
A	2,470	1.7	1,971	1.3	47	4,488
В	3.144	2.2	1,927	1.3	48	5,119
C	354	0.3	296	0.2	2	652
Influenza-associated pediatric mortality§§	22	0	23	0	_	45
Legionellosis	1,475	1.0	806	0.5	20	2,301
Listeriosis	404	0.3	487	0.3	5	896
Lyme disease	12.634	8.7	10,077	6.8	594	23,305
Malaria	985	0.7	490	0.3	19	1,494
Measles	31	0	34	0	1	66
Meningococcal disease, invasive						
all serogroups	618	0.4	620	0.4	7	1,245
serogroup A, C, Y, & W-135	149	0.1	147	0.1	1	297
serogroup B	85	0.1	71	0		156
other serogroup	14	0	13	0	_	27
serogroup unknown	370	0.3	389	0.3	6	765
Mumps	182	0.1	130	0.1	2	314
Pertussis	10,872	7.5	13,469	9.0	1,275	25,616
	4	0	4	0	1,275	23,010
Plague	-	0	1	0	_	1
Poliomyelitis, paralytic		0	9	0	1	16
Psittacosis	6 98	0.1	38	0	1	136
Q fever	98	0.1	38	U	_	130
Rabies		0		0		
human	2	0	-	0	40	4 000
Rocky Mountain spotted fever	1,034	0.7	889	0.6	13	1,936
Rubella	8	0	3	0		11
Rubella, congenital syndrome	0	0	1	0		1
Salmonellosis	21,727	15.0	22,981	15.4	614	45,322
Shigellosis	7,518	5.2	8,407	5.6	243	16,168
Streptococcal disease,						
invasive, group A	2,391	2.1	2,192	1.8	132	4,715
Streptococcal toxic-shock syndrome	64	0.1	65	0.1	-	129
Streptococcus pneumoniae,						
invasive disease ^{††}						
drug resistant, all ages	1,407	1.4	1,462	1.4	127	2,996
age <5 yrs	867	9.3	618	6.9	10	1,495
Syphilis, primary & secondary [¶]	7,383	5.1	1,339	0.9	2	8,724
Tetanus	14	0	13	0	-	27
Toxic-shock syndrome	19	0	71	0.1		90
Trichinellosis	13	0	3	0	(MASA)	16
Tuberculosis	8,715	6.0	5,382	3.6	angen	14,097
Tularemia	95	0.1	58	0	1	154
Typhoid fever	180	0.1	142	0.1	2	324
Vancomycin-intermediate						
Staphylococcus aureus	2	0	_	0	-	1
Vancomycin-resistant						
Staphylococcus aureus	2	0	1	0		:

^{§§} Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD) (proposed), as of December 31, 2005.

¹¹ Totals reported to the Division of TB Elimination, NCHHSTP (proposed), as of May 12, 2006.

TABLE 5. Reported cases and incidence* of notifiable diseases,† by race — United States, 2005

Disease	American Indian or Alaska Native		Asian or Pacific Islander		Black		White		Other	Race not stated	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	No.	Total
AIDS§	205	6.5	515	3.8	20,711	53.7	15,402	6.5	143	4,144	41,120
Botulism											
infant	_	_	7	3.6	2	0.3	44	1.4	1	31	85
other (wound & unspecified)	1	0	1	0	4	0	7	0	0	18	31
Brucellosis	0	0	8	0.1	0	0	51	0	0	61	120
Chlamydia ^{¶,**}	13,749	436.7	15,180	111.3	327,635	848.8	297,853	125.0	27,859	294,169	976,445
Coccidioidomycosis††	41	2.1	125	1.6	223	2.2	1,429	1.7	29	4.695	6.542
Cryptosporidiosis	11	0.3	56	0.4	360	0.9	3.288	1.4	235	1,709	5,659
Cyclosporiasis	1	0	3	0	8	0	438	0.2	3	90	543
Domestic arboviral diseases§§ California serogroup											
neuroinvasive	0	0	1	0	3	0	62	0	1	6	73
West Nile											
neuroinvasive	19	0.6	5	0	116	0.3	902	0.4	16	251	1,309
nonneuroinvasive	19	0.6	11	0.1	42	0.1	1,247	0.5	17	355	1,691
Ehrlichiosis											
human granulocytic	6	0.2	5	0	4	0	484	0.2	8	279	786
human monocytic	21	0.7	1	0	15	0	358	0.2	3	108	506
human (other & unspecified)	0	0	0	0	0	0	92	0	3	17	112
Enterohemorrhagic											
Escherichia coli infection											
O157:H7	8	0.3	36	0.3	88	0.2	1,799	0.8	77	613	2,621
Shiga toxin-positive											-,
non-O157	1	0	2	0	17	0	276	0.1	13	192	501
not serogrouped	1	0	3	0	22	0.1	240	0.1	12	129	407
Giardiasis	76	2.7	1,578	12.5	1,396	4.2	8,287	4.1	641	7.755	19,733
Gonorrhea**	2.538	80.6	2,825	20.7	179,186	464.2	67,669	28.4	6,243	81,132	339,593
Haemophilus influenzae, invasive disease	_,				,		,		-,		,
all ages, serotypes	31	1.0	37	0.3	260	0.7	1,458	0.6	63	455	2,304
age <5 yrs											
nonserotype b	6	2.7	4	0.4	19	0.6	65	0.4	1	40	135
unknown serotype	8	3.6	2	0.2	34	1.0	106	0.7	9	58	217

* Per 100,000 population. Diseases for which <25 cases were reported are not included in this table.

[†] No cases of anthrax; diphtheria; domestic arbovial disease, western equine encephalitis virus, neuroinvasive and nonneuroinvasive, eastern equine nonneuroinvasive, and Powassen nonneuroinvasive; severe acute respiratory syndrome—associated coronavirus (SARS-CoV) disease; smallpox; or yellow fever were reported in 2005. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review. Data on human immunodeficiency virus (HIV) infections are not included because HIV infection reporting has been implemented on different dates and using different methods than for acquired immunodeficiency syndrome (AIDS) case reporting.

§ Total number of AIDS cases reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) (proposed), through December 31, 2005.

[¶] Chlamydia refers to genital infections caused by Chlamydia trachomatis.

** In addition to data collected through the National Electronic Telecommunications System for Surveillance (NETSS), certain data on ethnicity are collected on aggregate forms different from those used for reported cases. Thus, the total number of cases reported here can differ slightly from totals reported in other surveillance summaries. Totals reported to the Division of STD Prevention, NCHHSTP (proposed), as of May 5, 2006.

†† Notifiable in <40 states.

§§ Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (NCZVED) (proposed) (ArboNET Surveillance), as of June 23, 2006.

TABLE 5. (Continued) Reported cases and incidence* of notifiable diseases,† by race — United States, 2005

Disease	American Indian or Alaska Native		Asian or Pacific Islander		Black		White		Other	Race not stated	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	No.	Total
Hansen disease (leprosy)	0	0	17	0.1	8	0	28	0	0	34	87
Hantavirus pulmonary syndrome	3	0.1	0	0	1	0	21	0	1	-	26
Hemolytic uremic syndrome.											
postdiarrheal	2	0.1	5	0	8	0	167	0.1	3	36	221
Hepatitis, viral, acute											
A	14	0.4	218	1.6	286	0.7	2.365	1.0	133	1.472	4,488
В	32	1.1	157	1.2	1.078	2.8	2,333	1.0	139	1.380	5,119
C	8	0.3	2	0	39	0.1	434	0.2	17	152	652
Influenza-associated		0.0	_		-						
pediatric mortality§§	0	0	4	0	8	0	24	0	0	9	45
Legionellosis	10	0.3	18	0.1	362	0.9	1,476	0.6	63	372	2.301
Listeriosis	4	0.1	40	0.3	82	0.2	559	0.2	26	185	896
Lyme disease	36	1.1	129	0.9	167	0.4	10.736	4.5	2.007	10.230	23,305
Malaria	6	0.2	94	0.7	711	1.8	297	0.1	44	342	1,494
Measles	0	0	5	0	1	0	48	0	4	8	66
Meningococcal disease, invasive	-	-	-			~	10				-
all serogroups	11	0.3	25	0.2	169	0.4	769	0.3	29	242	1,245
serogroup A, C, Y, & W-135	4	0.1	2	0	58	0.2	192	0.1	4	37	297
serogroup B	1	0	2	0	16	0	107	0	4	26	156
other serogroup	0	0	2	0	4	0	19	0	0	2	27
serogroup unknown	6	0.2	18	0.1	90	0.2	445	0.2	21	185	765
Mumps	5	0.2	27	0.2	20	0.1	151	0.1	4	107	314
Pertussis	377	12.0	394	2.9	1.075	2.8	16.955	7.1	319	6.496	25.616
Q fever	4	0.1	1	0	7	0	95	0	1	28	136
Rocky Mountain spotted fever	109	3.6	10	0.1	140	0.4	1,358	0.6	15	304	1,936
Salmonellosis	267	8.5	1.034	7.6	3.909	10.1	23.897	10.0	1,352	14,863	45,322
Shigellosis	300	9.5	231	1.7	2.152	5.6	7.247	3.0	332	5.906	16,168
Streptococcal disease,	300	5.5	231	1.7	2,102	5.0	1,241	3.0	302	5,500	10,100
invasive, group A	91	4.0	115	1.4	582	1.8	2.695	1.4	143	1,089	4,715
Streptococcal toxic-shock	31	4.0	113	1.4	302	1.0	2,033	1.79	143	1,005	4,713
syndrome	1	0	4	0.1	12	0	93	0.1	8	11	129
Streptococcus pneumoniae.	,	0	4	0.1	12	U	30	O. I	0		123
invasive disease ^{††}											
drug resistant, all ages	15	0.8	13	0.2	582	1.9	1,791	1.0	89	506	2.996
age <5 yrs	22	11.7	39	4.4	337	11.4	685	4.8	50	362	1,495
Syphilis, primary & secondary**	62	2.0	151	1.1	3.460	9.0	4,391	1.8	192	468	8,724
Tetanus	0	0	2	0	3,400	0	4,391	0	0	400	27
Toxic-shock syndrome	0	0	0	0	4	0	71	0	1	14	90
Tuberculosis 19	168	5.3	3.325	24.4	4.074	10.6	6.438	2.7	55	37	14.097
Tularemia	100	0.3	3,325	0	4,074	0	96	0	0	47	154
	3	0.3	119	0.9	25	0.1	51	0	26	100	324
Typhoid fever	3	0.1	119	0.9	25	0.1	51	U	20	100	324

^{§§} Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD) (proposed), as of December 31, 2005.

¹¹ Totals reported to the Division of TB Elimination, NCHHSTP (proposed), as of May 12, 2006.

TABLE 6. Reported cases and incidence* of notifiable diseases.† by ethnicity — United States, 2005

	His	spanic	Non-H	ispanic	Ethnicity not stated	
Disease	No.	Rate	No.	Rate	No.	Total
AIDS§	7,522	18.2	31,317	12.4	2,281	41,120
Botulism						
infant	17	1.9	43	1.4	25	85
other (wound & unspecified)	10	0	12	0	9	31
Brucellosis	58	0.1	29	0	33	120
Chlamydia ^{¶,**}	137,796	333.5	470,040	186.3	368,609	976,445
Coccidioidomycosis††	908	4.9	1,463	1.7	4,171	6,542
Cryptosporidiosis	323	0.8	2,638	1.0	2,698	5,659
Cyclosporiasis	28	0.1	416	0.2	99	543
Domestic arboviral diseases§§						
California serogroup					4-	
neuroinvasive	1	0	55	0	17	73
West Nile						
neuroinvasive	148	0.4	663	0.3	498	1,309
nonneuroinvasive	116	0.3	910	0.4	665	1,691
Ehrlichiosis						
human granulocytic	18	0	407	0.2	361	786
human monocytic	18	0	345	0.1	143	506
human (other & unspecified)	5	0	77	0	30	112
Enterohemorrhagic Escherichia coli infection						
O157:H7	104	0.3	1,505	0.6	1,012	2,621
Shiga-toxin-positive						
non-O157	39	0.1	218	0.1	244	501
not serogrouped	38	0.1	211	0.1	158	407
Giardiasis	1,519	4.6	8,960	4.1	9,254	19,733
Gonorrhea**	23,746	57.5	192,984	76.5	122,863	339,593
Haemophilus influenzae,						
invasive disease						
all ages, serotypes	151	0.4	1,286	0.5	867	2,304
age <5 yrs						
nonserotype b	43	1.0	66	0.4	26	135
unknown serotype	29	0.7	110	0.7	78	217

* Per 100,000 population. Diseases for which <25 cases were reported are not included in this table.

[†] No cases of anthrax; diphtheria; domestic arbovial disease, western equine encephalitis virus, neuroinvasive and nonneuroinvasive, eastern equine nonneuroinvasive, and Powassen nonneuroinvasive; severe acute respiratory syndrome—associated coronavirus (SARS-CoV) disease; smallpox; or yellow fever were reported in 2005. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review. Data on human immunodeficiency virus (HIV) infections are not included because HIV infection reporting has been implemented on different dates and using different methods than for acquired immunodeficiency syndrome (AIDS) case reporting.

§ Total number of AIDS cases reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) (proposed), through December 31, 2005.

¶ Chlamydia refers to genital infections caused by Chlamydia trachomatis.

** In addition to data collected through the National Electronic Telecommunications System for Surveillance (NETSS), certain data on ethnicity are collected on aggregate forms different from those used for reported cases. Thus, the total number of cases reported here can differ slightly from totals reported in other surveillance summaries. Totals reported to the Division of STD Prevention, NCHHSTP (proposed), as of May 5, 2006.

†† Notifiable in <40 states.

§§ Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (NCZVED) (proposed) (ArboNET Surveillance), as of June 23, 2006.

TABLE 6. (Continued) Reported cases and incidence* of notifiable diseases,† by ethnicity — United States, 2005

	His	panic	Non-Hi	spanic	Ethnicity not stated No.	Total
Disease	No.	Rate	No.	Rate		
Hansen disease (leprosy)	26	0.1	34	0	27	87
Hantavirus pulmonary syndrome	6	0	20	0	_	26
Hemolytic uremic syndrome, postdiarrheal	24	0.1	142	0.1	55	221
Hepatitis, viral, acute						
A	1.146	2.8	2,042	0.8	1,300	4,488
В	463	1.2	2,717	1.1	1,939	5,119
C	62	0.2	302	0.1	288	652
Influenza-associated pediatric mortality§§	11	0	23	0	11	45
Legionellosis	90	0.2	1,329	0.5	882	2,301
Listeriosis	115	0.3	513	0.2	268	896
Lyme disease	281	0.7	7.759	3.1	15,265	23,305
Malaria	99	0.2	907	0.4	488	1,494
Measles	2	0	51	0	13	66
Meningococcal disease, invasive						
all serogroups	159	0.4	698	0.3	388	1.245
serogroup A, C, Y, & W-135	30	0.1	191	0.1	76	297
serogroup B	22	0.1	89	0	45	156
other serogroup	3	0	16	0	8	27
serogroup unknown	103	0.2	397	0.2	265	765
Mumps	42	0.1	151	0.1	121	314
Pertussis	3,400	8.2	15,195	6.0	7.021	25,616
Q fever	13	0	83	0	40	136
Rocky Mountain spotted fever	66	0.2	1,359	0.5	511	1,936
Salmonellosis	4.951	12.0	20,450	8.1	19.921	45,322
Shigellosis	4,551	11.0	5.579	2.2	6.038	16,168
Streptococcal disease.	,,,,,,				-1	
invasive, group A	414	1.5	2.267	1.1	2.034	4,715
Streptococcal toxic-shock	***				-1	.,
syndrome	12	0.1	51	0	66	129
Streptococcus pneumoniae,						
invasive disease††						
drug resistant, all ages	144	0.6	1,507	8.0	1.345	2,996
age <5 vrs	173	4.2	634	4.5	688	1,495
Syphilis, primary & secondary**	1.294	3.1	6.437	2.6	993	8.724
Tetanus	0	0	20	0	7	27
Toxic-shock syndrome	4	0	52	0	34	90
Tuberculosis	4.043	9.8	10.005	4.0	49	14,097
Tularemia	3	0	81	0	70	154
Typhoid fever	42	0.1	182	0.1	100	324

^{§§} Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD) (proposed), as of December 31, 2005.

¹¹ Totals reported to the Division of TB Elimination, NCHHSTP (proposed), as of May 12, 2006.

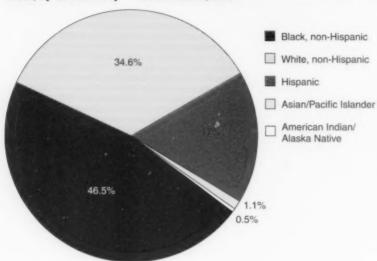
PART 2

Graphs and Maps for Selected Notifiable Diseases in the United States, 2005

Abbreviations and Symbols Used in Graphs and Maps

- U Data not available.
- Not notifiable (i.e., report of disease not required in that jurisdiction).
- AS American Samoa
- CNMI Commonwealth of Northern Mariana Islands
- **GU** Guam
- PR Puerto Rico
- VI U.S. Virgin Islands

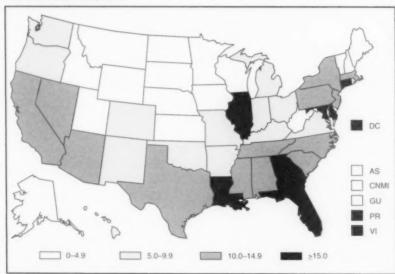
ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS). Percentage of reported cases, by race/ethnicity* — United States, 2005



*For 0.3% of respondents, race/ethnicity was unknown.

Of persons reported with AIDS during 2005, the greatest percentage were non-Hispanic blacks, followed by non-Hispanic whites, Hispanics, Asians/Pacific Islanders, and American Indians/ Alaska Natives.

ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS). Incidence* — United States† and U.S. territories, 2005

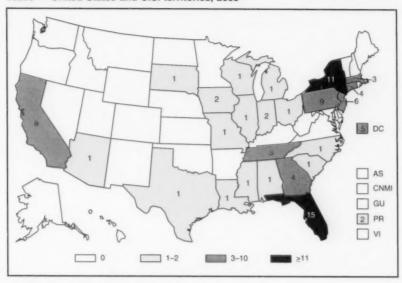


* Per 100,000 population.

†Includes 209 persons with unknown state of residence.

The highest AIDS rates were observed in the northeastern part of the country. High incidence (i.e., ≥15 cases per 100,000 population) also was reported in the southeastern states, the U.S. Virgin Islands, and Puerto Rico.

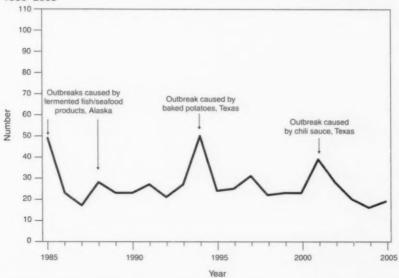
ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS). Number of reported pediatric* cases — United States and U.S. territories, 2005



*Children and adolescents aged <13 years.

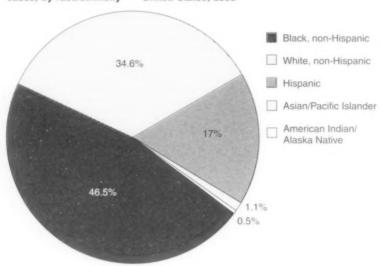
During 2005, a total of 93 new cases were reported in the United States and U.S. territories.

BOTULISM, FOODBORNE. Number of reported cases, by year — United States, 1985–2005



Home-canned foods and Alaska Native foods consisting of fermented foods of marine origin remain the principal sources of foodborne botulism in the United States. During 2005, two fatal cases of foodborne botulism were reported.

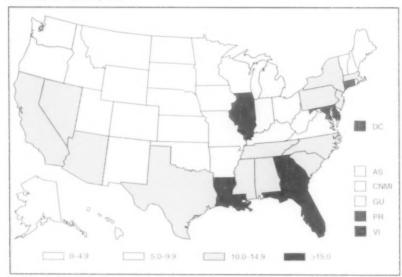
ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS). Percentage of reported cases, by race/ethnicity* — United States, 2005



*For 0.3% of respondents, race/ethnicity was unknown.

Of persons reported with AIDS during 2005, the greatest percentage were non-Hispanic blacks, followed by non-Hispanic whites, Hispanics, Asians/Pacific Islanders, and American Indians/ Alaska Natives.

ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS). Incidence* — United States† and U.S. territories, 2005

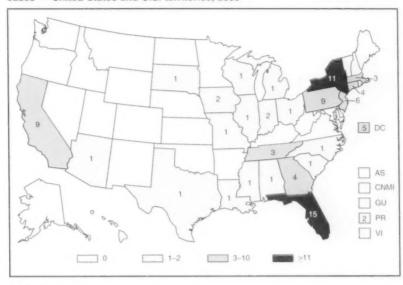


Per 100.000 population.

Includes 209 persons with unknown state of residence.

The highest AIDS rates were observed in the northeastern part of the country. High incidence (i.e., >15 cases per 100,000 population) also was reported in the southeastern states, the U.S. Virgin Islands, and Puerto Rico.

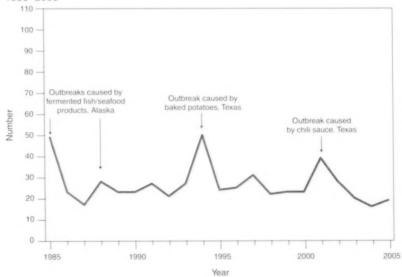
ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS). Number of reported pediatric* cases — United States and U.S. territories, 2005



*Children and adolescents aged <13 years.

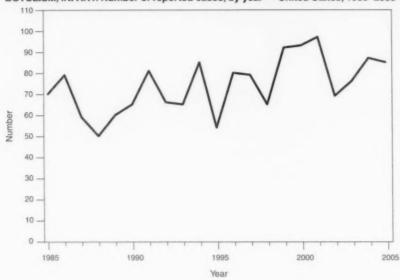
During 2005, a total of 93 new cases were reported in the United States and U.S. territories.

BOTULISM, FOODBORNE. Number of reported cases, by year — United States, 1985-2005



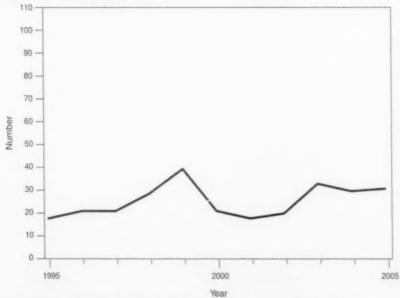
Home-canned foods and Alaska Native foods consisting of fermented foods of marine origin remain the principal sources of foodborne botulism in the United States. During 2005, two fatal cases of foodborne botulism were reported.

BOTULISM, INFANT. Number of reported cases, by year — United States, 1985-2005



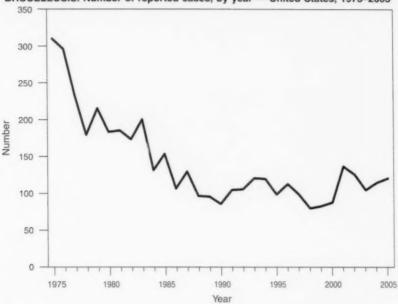
Infant botulism is the most common type of botulism in the United States. Cases are sporadic, and risk factors remain substantially unknown.

BOTULISM, OTHER (includes wound and unspecified). Number of reported cases, by year — United States, 1995-2005



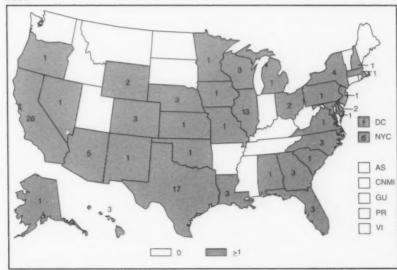
Wound botulism cases occur almost exclusively in the western United States among injectiondrug users and are associated with a particular type of heroin known as black tar heroin. During 2005, all cases of wound botulism occurred among injection-drug users.

BRUCELLOSIS. Number of reported cases, by year — United States, 1975-2005



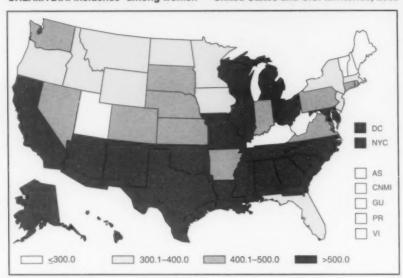
The incidence of brucellosis has remained stable in recent years, reflecting an ongoing risk for infection with *Brucella suis* acquired through contact with feral swine in the United States, and *B. melitensis* and *B. abortus* acquired through exposure to unpasteurized milk products in countries with endemic brucellosis in sheep, goats, and cattle.

BRUCELLOSIS. Number of reported cases — United States and U.S. territories, 2005



The incidence of brucellosis has remained stable in recent years, reflecting an ongoing risk from feral swine in the United States, and exposure to unpasteurized milk products from countries with endemic brucellosis.

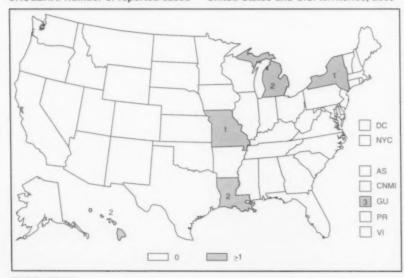
CHLAMYDIA. Incidence* among women — United States and U.S. territories, 2005



* Per 100,000 population.

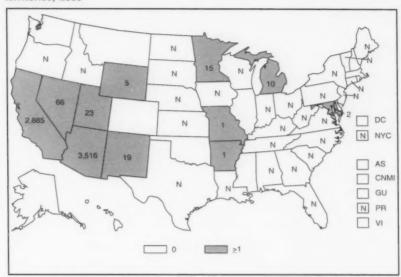
Chlamydia refers to genital infections caused by *Chlamydia trachomatis*. In 2005, the chlamydia rate among women was 496.5 cases per 100,000 population.

CHOLERA. Number of reported cases — United States and U.S. territories, 2005



In 2005, the majority of cholera infections in the United States were acquired in states or territories with large marine coasts, where noncommercial harvesting of shellfish and fish is a common practice. Consumption of contaminated seafood and foreign travel remain the most common sources of infection.

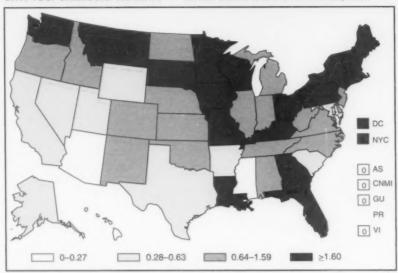
COCCIDIOIDOMYCOSIS. Number of reported cases — United States* and U.S. territories, 2005



* In the United States, coccidioidomycosis is endemic in the southwestern states. However, cases have been reported in other states, typically among travelers returning from areas in which the disease is endemic.

Reports of coccidioidomycosis cases increased nationwide in 2005. Persons with cases reported from outside the endemic states of California, Arizona, Nevada, New Mexico, and Texas likely were exposed during travel to an endemic area.

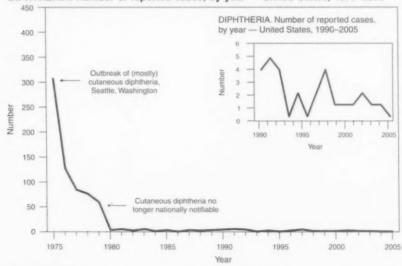
CRYPTOSPORIDIOSIS. Incidence* — United States and U.S. territories, 2005



* Per 100,000 population

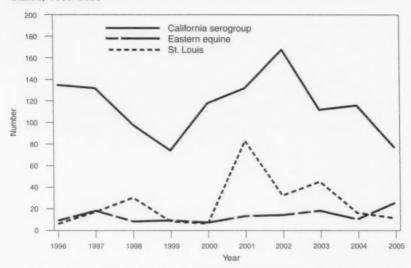
Transmission of *Cryptosporidium* continues to occur throughout the United States with increased diagnosis or reporting occurring in northern states. However, state incidence figures should be compared with caution because state surveillance systems have varying capabilities to detect cases. Peak onset of cryptosporidiosis occurs annually during summer through early fall, coinciding with the summer recreational water season.

DIPHTHERIA. Number of reported cases, by year — United States, 1975-2005



For the second consecutive year, no cases of respiratory diphtheria were reported in 2005.

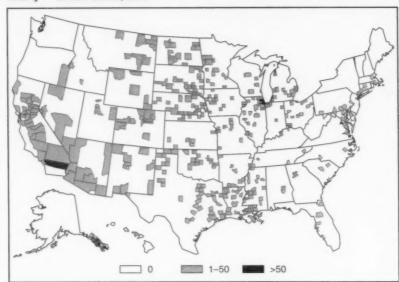
DOMESTIC ARBOVIRAL DISEASES. Number* of reported cases, by year — United States, 1996–2005



* Data from the Coordinating Center for Infectious Diseases (proposed) (ArboNET Surveillance). Only reported cases of neuroinvasive disease are shown.

Arboviral diseases are seasonal, occurring during the summer and fall, with incidence peaking in the late summer. The most common arboviruses affecting humans in the United States are West Nile virus (WNV), La Crosse virus (LACV), Eastern equine encephalitis virus (EEEV), and St. Louis encephalitis virus (SLEV). California serogroup viruses (primarily LACV in the eastern United States) cause encephalitis, especially in children. In 2005, cases were reported in 11 states (Alabama, Georgia, Louisiana, Minnesota, Mississippi, North Carolina, Ohio, Tennessee, Virginia, West Virginia, and Wisconsin). During 1964–2005, a median of 69 (range: 29–167) cases per year were reported in the United States. EEEV disease in humans is associated with high mortality rates (>20%) and severe neurologic sequelae. In 2005, cases were reported in seven states (Alabama, Florida, Georgia, Louisiana, Massachusetts, New Hampshire, and South Carolina). During 1964–2005, a median of five (range: 0–21) cases per year were reported in the United States. Before the introduction of WNV to the United States, SLEV was the nation's leading cause of epidemic viral encephalitis. In 2005, cases were reported in two states (Louisiana and Mississippi). During 1964–2005, a median of 26 (range: 2–1,967) cases per year were reported in the United States.

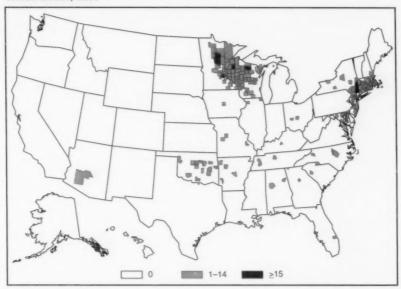
DOMESTIC ARBOVIRAL DISEASES, WEST NILE. Number * of reported cases, by county — United States, 2005



* Data from the Coordinating Center for Infectious Diseases (proposed) (ArboNET Surveillance). Only reported cases of neuroinvasive disease are shown.

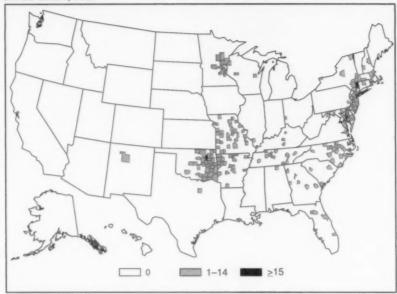
In 2005, a total of 42 states and the District of Columbia (DC) reported neuroinvasive West Nile virus (WNV) disease. Since WNV was first recognized in the United States during an encephalitis outbreak in New York City in 1999, a median of 1,142 (mean: 1,199; range: 19–2,946) neuroinvasive cases per year were reported in the United States.

EHRLICHIOSIS, HUMAN GRANULOCYTIC. Number of reported cases, by county — United States, 2005



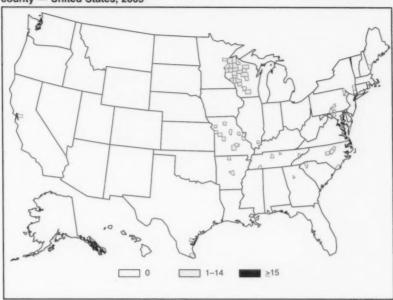
Human monocytic ehrlichiosis and human granulocytic ehrlichiosis (now known as human [granulocytic] anaplasmosis) are emerging tickborne diseases that became nationally notifiable in 1999. Because identification and reporting of these diseases remain incomplete, areas shown might not be definitive predictors for overall distribution or regional prevalence. Increases in numbers of reported cases of human rickettsial infections might result from multiple factors, including increases in vector tick populations; increases in human-tick contact as a result of encroachment into tick habitat through suburban/rural recreational activities and housing construction; changes in case definitions, case report forms, and laboratory tests; and increased use of active surveillance methods to supplement previously passive surveillance methods as a result of increased resource availability and perception of high case density in newly surveyed areas. The pathogen responsible for human granulocytic ehrlichiosis, genus Ehrlichia, has been reclassified and now belongs to the genus Anaplasma. Diseases resulting from infection with Ehrlichia chaffeensis, Anaplasma phagocytophilum (formerly Ehrlichia phagocytophila), and other pathogens (comprised of Ehrlichia ewingii and undifferentiated species) have been known by the acronyms "HME," "HGE," and "Ehrlichiosis (unspecified or other agent)," respectively. Until the case definitions for these diseases have been formally modified by resolutions of the Council of State and Territorial Epidemiologists, these original categories should be used for reporting cases of human ehrlichiosis and human anaplasmosis.

EHRLICHIOSIS, HUMAN MONOCYTIC. Number of reported cases, by county — United States, 2005



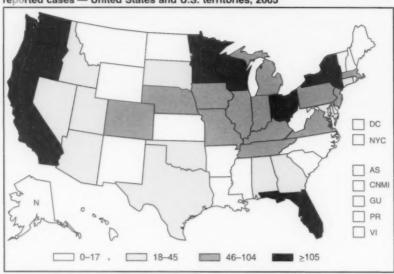
Human monocytic ehrlichiosis and human granulocytic ehrlichiosis (now known as human [granulocytic] anaplasmosis) are emerging tickborne diseases that became nationally notifiable in 1999. Because identification and reporting of these diseases remain incomplete, areas shown might not be definitive predictors for overall distribution or regional prevalence. Increases in numbers of reported cases of human rickettsial infections might result from multiple factors, including increases in vector tick populations; increases in human-tick contact as a result of encroachment into tick habitat through suburban/rural recreational activities and housing construction; changes in case definitions, case report forms, and laboratory tests; and increased use of active surveillance methods to supplement previously passive surveillance methods as a result of increased resource availability and perception of high case density in newly surveyed areas. The pathogen responsible for human granulocytic ehrlichiosis, genus Ehrlichia, has been reclassified and now belongs to the genus Anaplasma. Diseases resulting from infection with Ehrlichia chaffeensis, Anaplasma phagocytophilum (formerly Ehrlichia phagocytophila), and other pathogens (comprised of Ehrlichia ewingii and undifferentiated species) have been known by the acronyms "HME," "HGE," and "Ehrlichiosis (unspecified or other agent)," respectively. Until the case definitions for these diseases have been formally modified by resolutions of the Council of State and Territorial Epidemiologists, these original categories should be used for reporting cases of human ehrlichiosis and human anaplasmosis.

EHRLICHIOSIS, HUMAN (OTHER & UNSPECIFIED). Number of reported cases, by county — United States, 2005



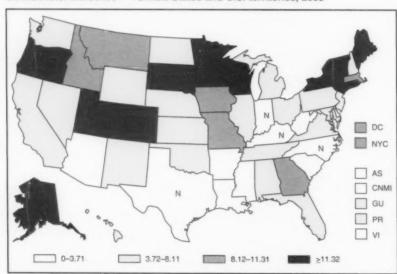
Human monocytic ehrlichiosis and human granulocytic ehrlichiosis (now known as human [granulocytic] anaplasmosis) are emerging tickborne diseases that became nationally notifiable in 1999. Because identification and reporting of these diseases remain incomplete, areas shown might not be definitive predictors for overall distribution or regional prevalence. Increases in numbers of reported cases of human rickettsial infections might result from multiple factors, including increases in vector tick populations; increases in human-tick contact as a result of encroachment into tick habitat through suburban/rural recreational activities and housing construction; changes in case definitions, case report forms, and laboratory tests; and increased use of active surveillance methods to supplement previously passive surveillance methods as a result of increased resource availability and perception of high case density in newly surveyed areas. The pathogen responsible for human granulocytic ehrlichiosis, genus Ehrlichia, has been reclassified and now belongs to the genus Anaplasma. Diseases resulting from infection with Ehrlichia chaffeensis, Anaplasma phagocytophilum (formerly Ehrlichia phagocytophila), and other pathogens (comprised of Ehrlichia ewingii and undifferentiated species) have been known by the acronyms "HME," "HGE," and "Ehrlichiosis (unspecified or other agent)," respectively. Until the case definitions for these diseases have been formally modified by resolutions of the Council of State and Territorial Epidemiologists, these original categories should be used for reporting cases of human ehrlichiosis and human anaplasmosis. Cases indicated above were unable to be classified definitively.

ENTEROHEMORRHAGIC ESCHERICHIA COLI O157:H7 INFECTION. Number of reported cases — United States and U.S. territories, 2005



Escherichia coli O157:H7 is the most common serotype of enterohemorrhagic E. coli isolated from ill persons. Other serotypes of E. coli also produce Shiga toxin and can cause diarrhea and hemolytic uremic syndrome. E. coli O157:H7 has been nationally notifiable since 1994. In 2001, all enterohemorrhagic E. coli serotypes were made nationally notifiable, although few clinical laboratories routinely test stool specimens for E. coli serotypes other than E. coli O157:H7.

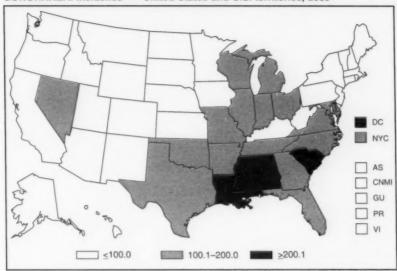
GIARDIASIS. Incidence* - United States and U.S. territories, 2005



* Per 100,000 population.

Transmission of Giardia continues to occur throughout the United States with increased diagnosis or reporting occurring in northern states. However, state incidence figures should be compared with caution because state surveillance systems have varying capabilities to detect cases. Peak onset of giardiasis occurs during summer through early fall, coinciding with the summer recreational water season.

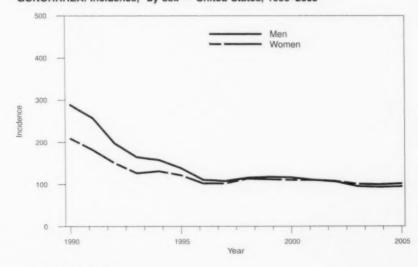
GONORRHEA. Incidence* — United States and U.S. territories, 2005



*Per 100,000 population.

In 2005, the overall U.S. gonorrhea rate was 115.6 cases per 100,000 population, an increase from the rate in 2004. The *Healthy People 2010* national objective is ≤19 cases per 100,000 population. Six states (Idaho, Maine, Montana, New Hampshire, Vermont, and Wyoming) reported rates below the national objective.

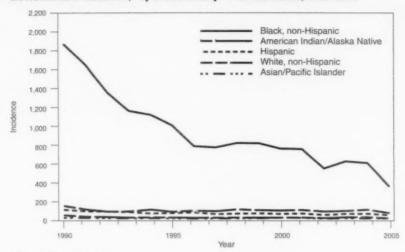
GONORRHEA. Incidence,* by sex — United States, 1990-2005



* Per 100,000 population.

The overall incidence of gonorrhea in the United States has declined since 1975 but increased in 2005 for the first time since 1999. In 2005, incidence was slightly higher among women than among men.

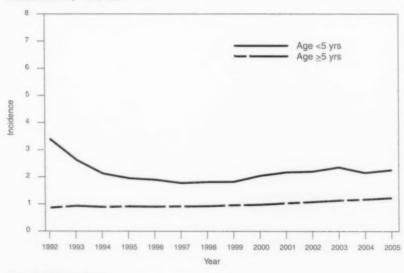
GONORRHEA. Incidence,* by race/ethnicity — United States, 1990-2005



* Per 100,000 population.

Gonorrhea incidence among blacks decreased considerably during the 1990s but continues to be the highest among all races/ethnicities. In 2005, gonorrhea incidence among non-Hispanic blacks was approximately 18 times greater than that for non-Hispanic whites.

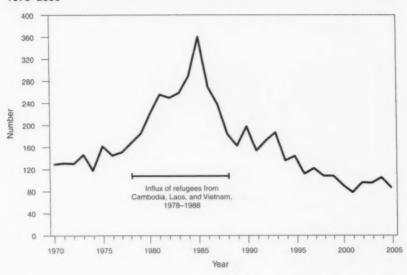
HAEMOPHILUS INFLUENZAE, INVASIVE DISEASE. Incidence,* by age group — United States, 1992–2005



* Per 100,000 population.

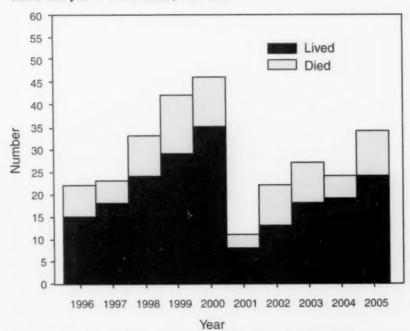
Substantial reductions in the incidence of *Haemophilus influenzae* serotype b (Hib) disease have been achieved through universal Hib vaccination. Before introduction of conjugate vaccines in 1987, the incidence of invasive Hib disease among children aged <5 years was estimated to be 100 cases per 100,000 population.

HANSEN DISEASE (LEPROSY). Number of reported cases, by year — United States, 1970–2005



The number of reported cases of Hansen Disease has remained stable for the last 6 years.

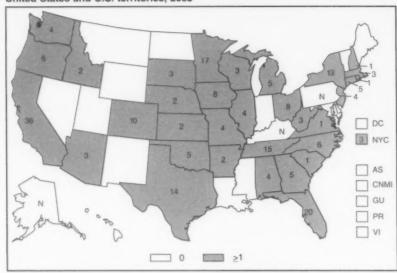
HANTAVIRUS PULMONARY SYNDROME. Number of reported cases, by survival status* and year — United States, 1996–2005



* Data from the National Center for Infectious and Respiratory Diseases (proposed).

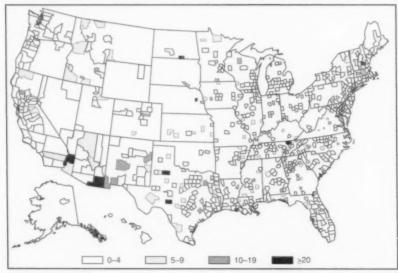
Hantaviruses are present in wild rodents throughout North America and continue to cause sporadic cases of severe illness associated with occupational or peridomestic rodent exposure.

HEMOLYTIC UREMIC SYNDROME, POSTDIARRHEAL. Number of reported cases — United States and U.S. territories, 2005



The majority of cases of postdiarrheal hemolytic uremic syndrome (HUS) in the United States are attributed to infection with *Escherichia coli* 0157:H7. Infection with other serotypes of Shiga toxin-producing *E. coli* can cause HUS. Half of HUS cases occur among children aged <5 years.

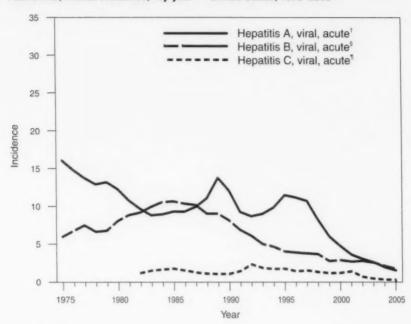
HEPATITIS A VIRUS INFECTION. Incidence,* by county — United States, 2005



*Per 100,000 population.

In 1999, routine hepatitis A vaccination was recommended for children living in 11 states with consistently elevated rates of disease. Since then, rates of infection with hepatitis A virus (HAV) have declined in all regions, with the greatest decline occurring in 10 western states. HAV infection rates are now the lowest ever reported and similar in all regions.

HEPATITIS, VIRAL. Incidence,* by year — United States, 1975-2005



* Per 100,000 population.

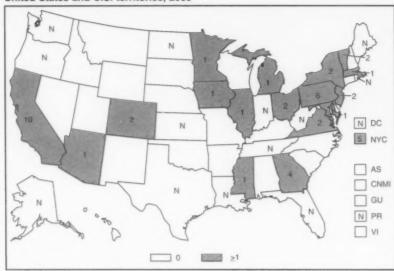
[†] Hepatitis A vaccine was first licensed in 1995.

§ Hepatitis B vaccine was first licensed in June 1982.

An anti-hepatitis C virus (HCV) antibody test first became available in May 1990.

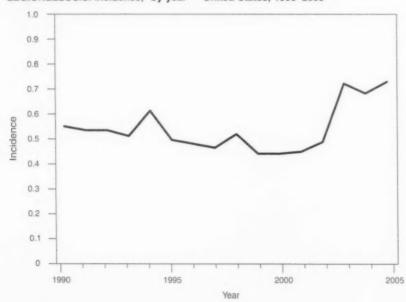
Incidence of hepatitis A virus infection continues to decline and in 2005 was the lowest ever recorded. This reduction in incidence is attributed at least in part to routine vaccination of children in states with consistently elevated rates. Incidence of hepatitis B virus infection has declined 79% since 1990. Routine hepatitis B vaccination of infants has reduced rates in children >95%. Rates also have declined among adults, but a large proportion of cases continue to occur among adults with high-risk behaviors. The elevated incidence of hepatitis C virus infection in the mid-to-late 1990s reflects erroneous reporting of chronically infected persons as having acute cases. An increase in the number of persons with chronic infection identified occurred during this time as the widespread availability of screening assays for anti-HCV increased the frequency of testing. However, increasing the specificity of the acute case definition and the establishment of a separate system for reporting chronic HCV infection have resulted in substantial improvement in the reliability of acute hepatitis C reporting in recent years.

INFLUENZA-ASSOCIATED PEDIATRIC MORTALITY. Number of reported cases — United States and U.S. territories, 2005



Initial reporting for this condition began in week 40 (the week ending October 9, 2004) of the 2004–05 influenza season; during 2005, a total of 45 influenza-associated pediatric deaths were reported to CDC by 17 states and New York City, with California reporting 10 deaths.

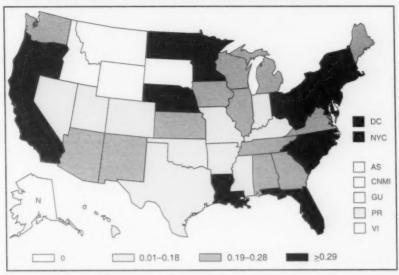
LEGIONELLOSIS. Incidence,* by year — United States, 1990-2005



* Per 100,000 population.

The increase in the incidence of legionellosis that began in 2003 was sustained in 2005. Whether this increase reflects a true increase in transmission, greater use of diagnostic testing, or increased reporting is unclear.

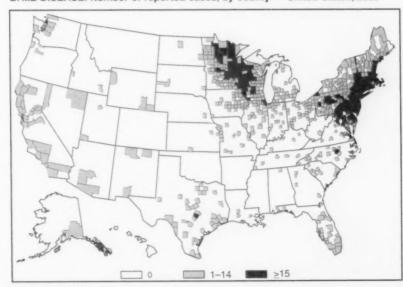
LISTERIOSIS. Incidence* — United States and U.S. territories, 2005



* Per 100,000 population.

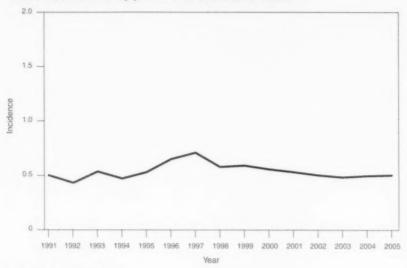
Listeriosis has been nationally notifiable since 2000. Although the infection is relatively uncommon, listeriosis is a leading cause of death attributable to foodborne illness in the United States. Recent outbreaks have been linked to deli meats and unpasteurized cheese.

LYME DISEASE. Number of reported cases, by county — United States, 2005



A rash that might be confused with the erythema migrans of early Lyme disease can occur after the bite of the Lone Star tick (*Amblyomma americanum*). These ticks, which do not transmit the Lyme disease bacterium, are common human-biting ticks in the southern and southeastern United States.

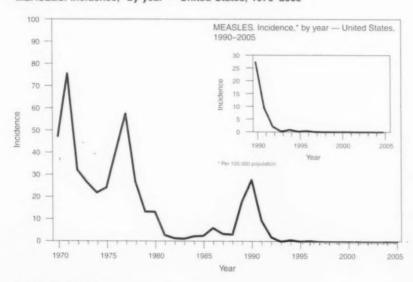
MALARIA. Incidence,* by year - United States, 1991-2005



* Per 100,000 population.

The number of reported cases of malaria in the United States has remained relatively stable for the preceding 15 years. Nearly all of these infections occur in persons who traveled recently to a malaria-endemic country.

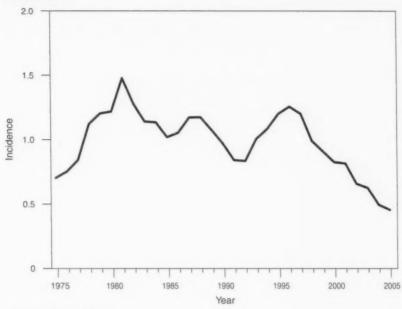
MEASLES. Incidence,* by year — United States, 1970-2005



* Per 100,000 population.

Measles incidence remains at less than one case per 1 million population. Measles vaccine was licensed in 1963.

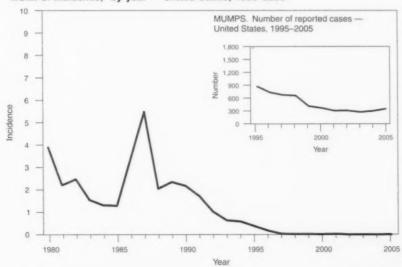
MENINGOCOCCAL DISEASE, INVASIVE. Incidence,* by year — United States, 1975–2005



* Per 100,000 population.

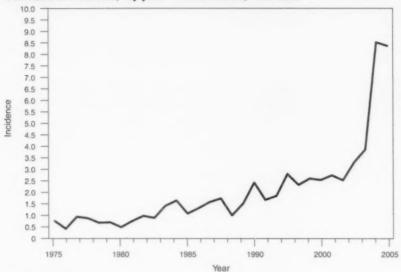
The highest incidence of meningococcal disease occurs among infants, with a second peak occurring during late adolescence. In 2005, a tetravalent (A, C, Y, and W-135) meningococcal conjugate vaccine was licensed and recommended for adolescents and others at increased risk for disease. Over time, the new vaccine is expected to have a substantial impact on the burden of meningococcal disease in the United States.

MUMPS. Incidence,* by year - United States, 1980-2005



* Per 100,000 population. Mumps vaccine was licensed in 1967.

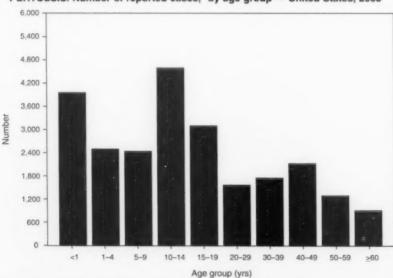
PERTUSSIS. Incidence,* by year — United States, 1975-2005



* Per 100,000 population.

In 2005, incidence of reported pertussis remained stable after doubling during 2003–2004. Increased availability of sensitive diagnostic tests and improved case recognition and reporting account for an unknown fraction of this increase.

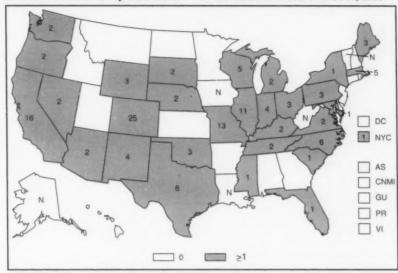
PERTUSSIS. Number of reported cases,* by age group — United States, 2005



*Of 25,616 cases of pertussis, age was reported unknown for 1,371 persons.

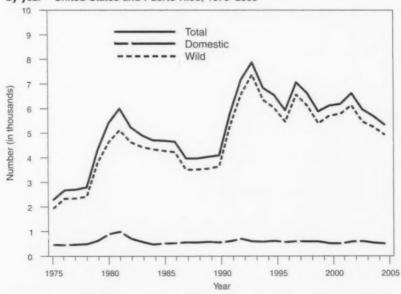
In 2005, a total of 3,279 (13%) reported cases of pertussis occurred among infants aged <6 months, who were too young to receive 3 doses of Diptheria and Tetanus Toxoids and Acellular Pertussis vaccine Absorbed (DTaP). In 2005, a total of 15,354 cases of pertussis occurred in adolescents aged 10–19 years and in adults aged ≥20 years. The Advisory Committee on Immunization Practices (ACIP) recommends a single dose of Tdap in adolescents aged 11–18 years and in adults aged 19–64 years to replace the next booster dose of tetanus and diphtheria toxoids vaccine (Td).

Q FEVER. Number of reported cases — United States and U.S. territories, 2005



Q fever became nationally notifiable in 1999. To capture as many cases of Q fever as possible, the Q fever case definition is intentionally broad. However, identification and reporting of Q fever remains incomplete, and the numbers of cases reported might not represent the overall distribution or regional incidence of disease.

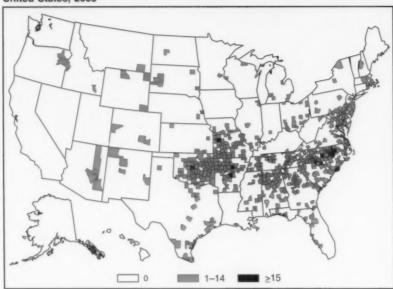
RABIES, ANIMAL. Number of reported cases among wild and domestic animals,* by year – United States and Puerto Rico, 1975–2005



*Data from the National Center for Zootic, Vector-Borne, and Enteric Diseases (proposed).

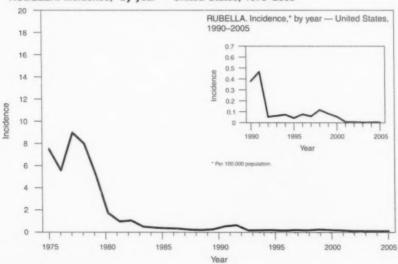
Periods of resurgence and decline of rabies incidence are primarily the result of cyclic reemergence. As populations are decimated by epizootics, numbers of reported cases decline until populations again reach levels to support epizootic transmission of disease. Recent declines in the number of reported cases among terrestrial reservoir species (raccoons, skunks, and foxes) have been offset by increases in testing and the subsequent detection of rabid bats. In addition, interventions such as the oral vaccination of wildlife species might contribute to the decreasing trend in recent years.

ROCKY MOUNTAIN SPOTTED FEVER. Number of reported cases, by county — United States, 2005



Increases in numbers of reported cases of Rocky Mountain spotted fever cases might result from multiple factors, including increases in vector tick populations; increases in human-tick contact as a result of encroachment into tick habitat through suburban/rural recreational activities and housing construction; changes in case definitions, case report forms, and laboratory tests; and increased use of active surveillance methods to supplement previously passive surveillance methods as a result of increased resource availability and perception of high case density in newly surveyed areas.

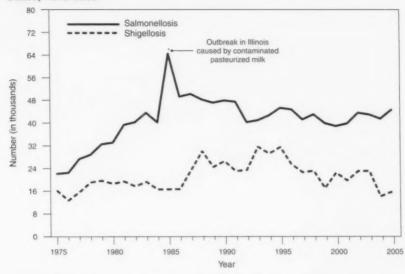
RUBELLA. Incidence,* by year — United States, 1975-2005



* Per 100,000 population.

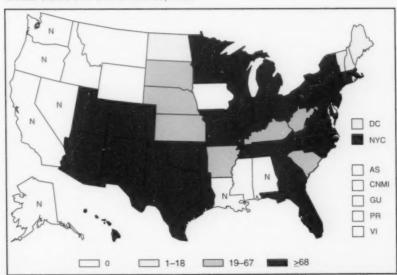
Rubella vaccine was licensed in 1969. Evidence suggests that rubella is no longer endemic in the United States (CDC. Elimination of rubella and congenital rubella syndrome—United States, 1969–2004. MMWR 2005;54:279–82).

SALMONELLOSIS and SHIGELLOSIS. Number of reported cases, by year — United States, 1975-2005

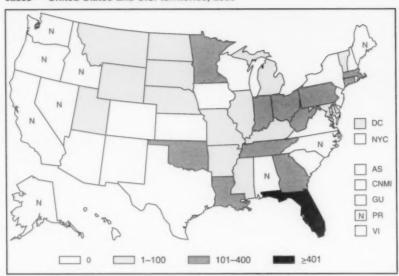


Foodborne transmission accounts for the majority of cases of salmonellosis. In the United States, the most common serotypes are Typhimurium, Entertidis, and Newport. During 2005, multistate outbreaks were linked to consumption of tomatoes and unpasteurized orange juice.

STREPTOCOCCAL DISEASE, INVASIVE, GROUP A. Number of reported cases — United States and U.S. territories, 2005

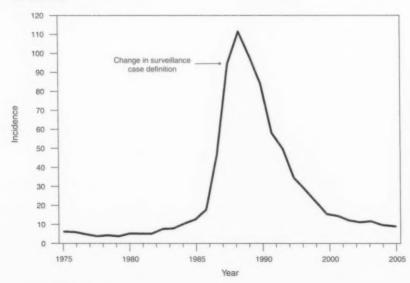


STREPTOCOCCUS PNEUMONIAE, INVASIVE, DRUG RESISTANT. Number of reported cases — United States and U.S. territories, 2005



A pneumococcal vaccine for children was licensed in 2000. The vaccine targets seven pneumococcal serotypes, five of which are responsible for the majority of infections by resistant organisms in the United States. Data from Active Bacterial Core surveillance, part of CDC's Emerging Infections Program, indicate that rates of disease caused by resistant pneumococci have declined since 2000.

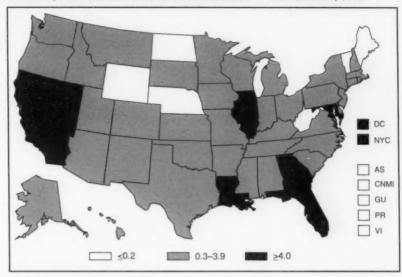
SYPHILIS, CONGENITAL. Incidence* among infants aged <1 year — United States, 1975–2005



* Per 100,000 live births.

Incidence of congenital syphilis has declined since 1991. In 2005, the rate was 8.0 cases per 100,000 live births.

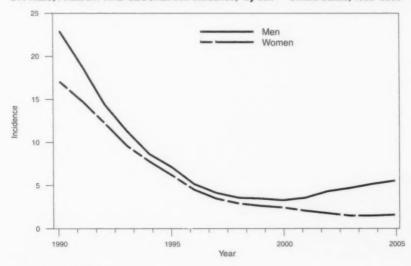
SYPHILIS, PRIMARY AND SECONDARY. Incidence* — United States, 2005



* Per 100,000 population.

In 2005, the overall U.S. rate of primary and secondary syphilis was 3.0 cases per 100,000 population, which is above the *Healthy People 2010* objective of 0.2 cases per 100,000 population per year. Six states (Maine, Nebraska, North Dakota, Vermont, West Virginia, and Wyoming) reported rates at or below the national objective.

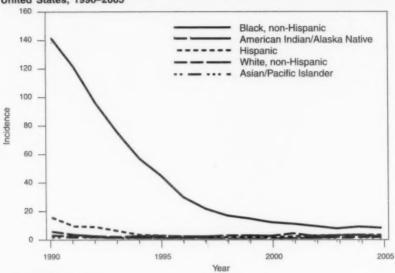
SYPHILIS, PRIMARY AND SECONDARY. Incidence,* by sex — United States, 1990-2005



* Per 100,000 population.

During 2004–2005, incidence of primary and secondary syphilis in the United States increased slightly, from 2.7 to 3.0 cases (women: from 0.8 to 0.9; men: from 4.7 to 5.1) per 100,000 population.

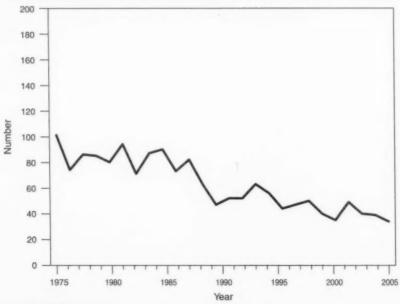
SYPHILIS, PRIMARY AND SECONDARY. Incidence,* by race/ethnicity — United States, 1990–2005



* Per 100,000 population.

During 2004–2005, incidence of primary and secondary syphilis increased among all races/ ethnicities except Asians/Pacific Islanders and American Indians/Alaska Natives. Incidence per 100,000 population increased from 8.8 to 9.8 cases among non-Hispanic blacks; from 3.1 to 3.3 cases among Hispanics; and from 1.6 to 1.8 cases among non-Hispanic whites. Incidence per 100,000 population decreased among American Indians/Alaska Natives from 3.1 to 2.4 cases and remained stable among Asians/Pacific Islanders at 1.2 cases.

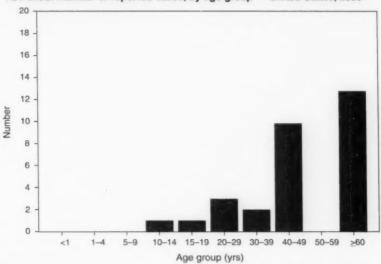
TETANUS. Number of reported cases,* by year — United States, 1975-2005



* Included neonatal cases.

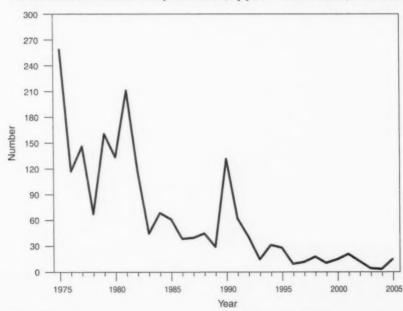
The number of reported cases and the reported incidence of tetanus continue at historically low levels. Neonatal tetanus has become rare; no cases have been reported in the United States since 2001.

TETANUS. Number of reported cases, by age group — United States, 2005



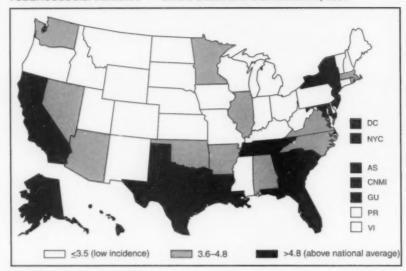
Tetanus disproportionately affects older U.S. residents, a substantial proportion of whom remain susceptible because they never have received a primary series of at least three tetanus toxin-containing vaccinations. No cases of neonatal tetanus have been reported since 2001.

TRICHINELLOSIS. Number of reported cases, by year — United States, 1975-2005



The limited numbers of reported cases of trichinellosis are associated with ingestion of meats of wild animals (bear and wild boar). Domestic pork—associated cases are now extremely rare as a result of improved methods of swine husbandry. A single cluster of three cases in one state was reported in 2005 that was associated with consumption of bear meat.

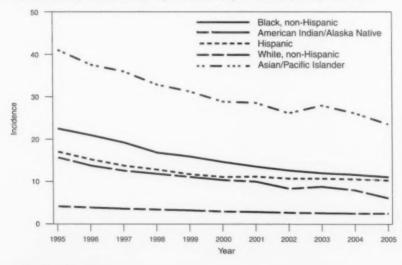
TUBERCULOSIS. Incidence* — United States and U.S. territories, 2005



* Per 100,000 population.

In 26 states, the tuberculosis rate was ≤3.5 cases per 100,000 population, the interim goal for the year 2000 established by the Advisory Council for the Elimination of Tuberculosis. In 12 states (Alaska, California, Florida, Georgia, Hawaii, Louisiana, Maryland, New Jersey, New York, South Carolina, Tennessee, and Texas) and the District of Columbia, reported rates exceeded the 2005 national average of 4.8 cases per 100,000 population.

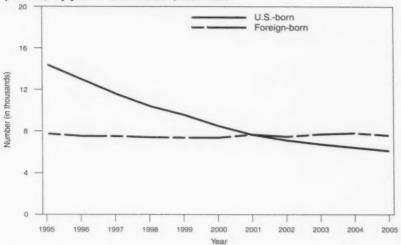
TUBERCULOSIS. Incidence,* by race/ethnicity — United States, 1995-2005



* Per 100,000 population.

Asians/Pacific Islanders had the highest tuberculosis rates, which declined from 43.5 per 100,000 population in 1995 to 25.5 in 2005. During 2004–2005, rates per 100,000 population declined by ≥50% in other racial/ethnic populations: among non-Hispanic blacks, from 23.2 to 10.9; among Hispanics, from 17.2 to 9.5; among American Indians/Alaska Natives, from 15.7 to 6.9; and among non-Hispanic whites, from 3.1 to 1.3.

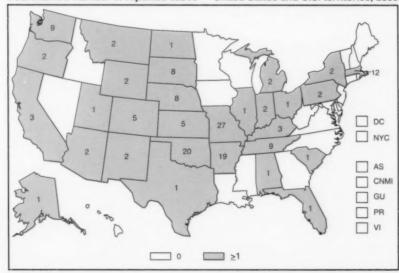
TUBERCULOSIS. Number of reported cases among U.S.-born and foreign-born persons,* by year — United States, 1995–2005



*For 330 cases, origin of patients was unknown.

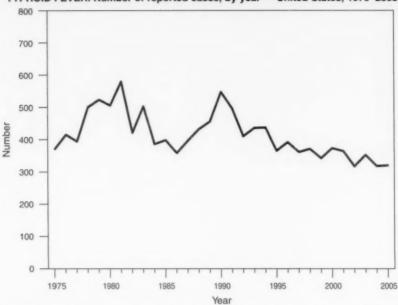
Overall, the number of cases in foreign-born persons remained relatively stable, at approximately 7,000–8,000 cases each year, whereas the number in U.S.-born persons decreased from >14,500 in 1995 to <6,500 in 2005.

TULAREMIA. Number of reported cases — United States and U.S. territories, 2005



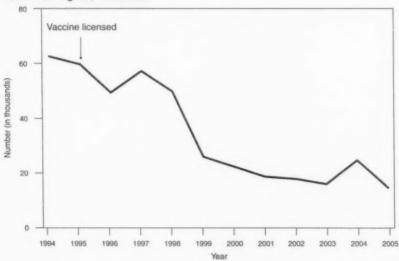
In 2005, approximately 60% of cases were reported from Arkansas, Oklahoma, Missouri, and Martha's Vineyard in Massachusetts. To better define the geographic distribution of *Francisella tularensis* subspecies, CDC requests that isolates be forwarded to the CDC laboratory in Fort Collins, Colorado, for subtyping.

TYPHOID FEVER. Number of reported cases, by year — United States, 1975-2005



Although the number of cases of typhoid fever reported annually appears to have stabilized, an increasing proportion of all cases of enteric fever appear to be caused by *Salmonella* Paratyphi A. Increasing antimicrobial resistance has complicated the management of cases of typhoid fever and cases of paratyphoid fever.

VARICELLA (CHICKENPOX). Number of reported cases — Illinois, Michigan, Texas, and West Virginia,* 1994–2005



*These four states maintained consistent and adequate surveillance by reporting cases constituting ≥5% of their birth cohort during 1990–1995 (**Source**: CDC. National Immunization Program, 1994–2005)

During 2004–2005, the number of varicella cases in four states (Michigan, Illinois, Texas, and West Virginia) decreased 30%; compared with the prevaccine years of 1993–1995, the number of cases declined 83%.

PART 3

Historical Summaries of Notifiable Diseases in the United States, 1974–2005

Abbreviations and Symbols Used in Tables

NA Data not available.No reported cases.

Notes: Rates < 0.01 after rounding are listed as 0.

Data in the MMWR Summary of Notifiable Diseases — United States, 2005 might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, and the use of different case definitions.

TABLE 7. Reported incidence* of notifiable diseases — United States, 1995-2005

TABLE 7. Reported incide											
Disease	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
AIDS [†]	27.20	25.21	21.85	7.21	16.66	14.95	14.88	15.29	15.36	15.28	14.00
Anthrax	-		_	_		0	0.01	0	_	-	-
Botulism, total (includes wound											
& unspecified)	0.04	0.05	0.05	0.04	0.06	0.05	0.06	0.03	0.01	0.02	0.01
foodborne	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0	0.01	0.01	0.01
Brucellosis	0.04	0.05	0.04	0.03	0.03	0.03	0.05	0.04	0.04	0.04	0.04
Chancroid	0.20	0.15	0.09	0.07	0.06	0.03	0.01	0.02	0.02	0	0.01
Chlamydia§	182.60	188.10	196.80	236.57	254.10	257.76	278.32	296.55	304.71	319.61	332.51
Cholera	0.01	0.01	0.01	0.01	0	0	0	0	0	0	0
Coccidioidomycosis	0.46	0.64	0.65	0.99	3.58	4.69	6.71	3.03	2.57	4.14	6.24
Cryptosporidiosis	1.13	1.07	1.12	1.61	0.92	1.17	1.34	1.07	1.22	1.23	1.93
Cyclosporiasis	1	1	1	9	0.07	0.03	0.07	0.06	0.03	0.14	0.24
Diphtheria	0	0.01	0.01	0	0	0	0	0	0	0	0
Domestic arboviral diseases		-									
California serogroup											
neuroinvasive											0.02
	9	7	1	1	1	1	9	9	1	1	0.02
nonneuroinvasive											0
eastern equine											0.01
neuroinvasive	1	-	9	1	1	1	9	- 1	7	1	
nonneuroinvasive		39	16		10		и	,	- 1	11	0
Powassan											
neuroinvasive	-	1	7	9	1	1	1	1	1	1	0
nonneuroinvasive	- 1	1	11	11	1	71	1	11	11	1	0
St. Louis											
neuroinvasive	_	_	_	_	_	_	_	_	_	_	0
nonneuroinvasive	1	1	9	1	9	1	1	9	1	1	0
West Nile											
neuroinvasive	-	-	-	-		-	-	_	_	_	0.45
nonneuroinvasive	9	1	1	9	1	9	1	9	1	1	0.58
western equine											
neuroinvasive	_	_		_	_	_	_	-	-	-	0
nonneuroinvasive	1	9	1	1	9	1	1	1	19	9	0
Ehrlichiosis											
human granulocytic	9	9	9	0.16	0.14	0.15	0.10	0.18	0.13	0.20	0.28
human monocytic	9	9	9	0.03	0.06	0.09	0.05	0.08	0.11	0.12	0.18
human (other & unspecified)**	9	1	9		0.00	-	-	-	_	-	0.04
Encephalitis/meningitis, arboviral†											0.04
California serogroup	0	0.04	0.04	0.04	0.03	0.04	0.05	0.06	0.06	0	tt
eastern equine	0	0.04	0.04	0.04	0.03	0.04	0.03	0.00	0.00	0	11
	9	1	1	1	9	1	1		0	0	11
Powassan	0	0	0.01	0.01	0	0	0.03	0		0	11
St. Louis	9	9	0.01	0.01	1	1	0.03	0.01	0.01		11
West Nile								1.01	1.00	0.43	11
western equine	0	0	0	0	0	0	0	0	0	_	11
Enterohemorrhagic Escherichia co infection											
O157:H7	1.01	1.18	1.04	1.28	1.77	1.74	1.22	1.36	0.93	0.87	0.89
non-O157	1	9	9	4	4	1	0.19	0.08	0.09	0.13	0.19
not serogrouped	9	9	1	1	1	1	0.06	0.02	0.05	0.13	0.16
Giardiasis	1	1	1	1	1	7	1	8.06	6.84	8.35	7.82
Gonorrhea	149.50	122.80	121.40	132.88	133.20	131.65	128.53	125.03	116.37	113.52	115.64
Haemophilus influenzae,											
invasive disease											
all ages, serotypes	0.45	0.45	0.44	0.44	0.48	0.51	0.57	0.62	0.70	0.72	0.78
age <5 yrs											
serotype b	1	9	9	1	1	1	1	0.18	0.16	0.03	0.04
nonserotype b	9	9	7	7	1	1	1	0.75	0.59	0.04	0.67
	9	9	1	9	1	1	1	0.80	1.15	0.97	1.08

* Per 100,000 population.

† Acquired immunodeficiency syndrome.

§ Chlamydia refers to genital infections caused by Chlamydia trachomatis.

Not nationally notifiable.

** Data for efficitions attributable to other or unspecified agents were withheld from publication pending the outcome of discussions about the reclassification of certain *Ehrlichia* species, which probably would affect how data in this category are reported.

†† See also domestic arboviral disease incidence in this table for 2005. In 2005, the domestic arboviral disease surveillance case definitions and categories were revised. The nationally notifiable arboviral encephalitis and meningitis conditions continued to be nationally notifiable in 2005, but under the category of arboviral neuroinvasive disease. In addition, in 2005, nonneuroinvasive domestic arboviral diseases for the six domestic arboviruses listed above were added to the list of nationally notifiable diseases.

TABLE 7. (Continued) Reported incidence* of notifiable diseases — United States, 1995-2005

Disease	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Hansen disease (leprosy)	0.06	0.05	0.05	0.05	0.04	0.04	0.03	0.04	0.03	0.04	0.03
Hantavirus pulmonary syndrome Hemolytic uremic syndrome,	NA	NA	NA	NA	NA	0.02	0	0.01	0.01	0.01	0.01
postdiarrheal	NA	NA	NA	NA	NA	0.10	0.08	0.08	0.06	0.07	0.08
Hepatitis, viral, acute											2.22
A	12.13	11.70	11.22	8.59	6.25	4.91	3.77	3.13	2.66	1.95	1.53
В	4.19	4.01	3.90	3.80	2.82	2.95	2.79	2.84	2.61	2.14	1.78
C	1.78	1.41	1.43	1.30	1.14	1.17	1.41	0.65	0.38	0.31	0.23
Influenza-associated											0.20
pediatric mortality	9	9	1	1	1	9	1	1	9	1	0.02
Legionellosis	0.48	0.47	0.44	0.51	0.41	0.42	0.42	0.47	0.78	0.71	0.78
Listeriosis	9	9	9	9	0.31	0.29	0.22	0.24	0.24	0.32	0.31
Lyme disease	4.49	6.21	4.79	6.39	5.99	6.53	6.05	8.44	7.39	6.84	7.94
Malaria	0.55	0.68	0.75	0.60	0.61	0.57	0.55	0.51	0.49	0.51	0.51
Measles	0.12	0.20	0.06	0.04	0.04	0.03	0.04	0.02	0.02	0.01	0.02
Meningococcal disease, invasive											0.00
all serogroups	1.25	1.30	1.24	1.01	0.92	0.83	0.83	0.64	0.61	0.47	0.42
serogroup A, C, Y, & W-135	99	99	99	99	99	99	99	99	99	99	0.10
serogroup B	55	99	\$5	55	99	99	99	99	99	99	0.05
other serogroup	99	99	99	55	99	99	99	99	55	99	0.01
serogroup unknown	99	99	99	99	99	99	99	55	99	99	0.26
Mumps	0.35	0.29	0.27	0.25	0.14	0.13	0.10	0.10	0.08	0.09	0.11
Pertussis	1.97	2.94	2.46	2.74	2.67	2.88	2.69	3.47	4.04	8.88	8.72
Plague	0	0.01	0.01	0	0	0	0	0	0	0	0.72
Poliomyelitis, paralytic	0	0.03	0.02	0.01	0	0	0	0	0	0	0
Psittacosis	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0	0	0.01
Q Fever	9	9	9	1	0	0.01	0.01	0.02	0.02	0.03	0.05
Rabies, human	0	0.01	0.01	0	0	0	0.01	0	0.02	0.03	0.05
Rocky Mountain spotted fever	0.23	0.32	0.16	0.14	0.21	0.18	0.25	0.39	0.38	0.60	0.66
Rubella	0.05	0.10	0.07	0.13	0.21	0.06	0.01	0.01	0.50	0.00	0.00
Rubella, congenital syndrome	0	0	0	0	0	0	0	0	0	0	0
Salmonellosis	17.66	17.15	15.66	16.17	14.89	14.51	14.39	15.73	15.16	14.47	15.43
SARS-CoV¶¶	1	9	9	1	1	1	9	1	0.0	14.47	10.40
Shigellosis	12.32	9.80	8.64	8.74	6.43	8.41	7.19	8.37	8.19	4.99	5.51
Smallpox	1	1	9	9	1	1	1	9	9	4.55	0.01
Streptococcal disease,											
invasive, group A	0.23	0.55	0.75	0.83	0.87	1.45	1.60	1.69	2.04	1.82	2.00
Streptococcal toxic-shock									2.0.	1.02	2.00
syndrome	0	0	0.01	0.02	0.02	0.04	0.04	0.05	0.06	0.06	0.07
Streptococcus pneumoniae.								0.00	0.00	0.00	0.01
invasive disease											
drug resistant, all ages	0.12	0.57	0.67	1.44	2.39	2.77	2.11	1.14	0.99	1.49	1.42
age <5 yrs	1	9	9	9	1	1	1.03	3.62	8.86	8.22	8.21
Syphilis									0.00	-	0.2.1
primary & secondary	6.30	4.29	3.19	2.61	2.50	2.19	2.17	2.44	2.49	2.71	2.97
total, all stages	26.20	19.97	17.39	14.19	13.07	11.58	11.45	11.68	11.90	11.94	11.33
Tetanus	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Toxic-shock syndrome	0.07	0.06	0.06	0.06	0.05	0.06	0.05	0.05	0.05	0.04	0.04
Trichinellosis	0.01	0.01	0.01	0.01	0	0.01	0.01	0.01	0	0	0.01
Tuberculosis	8.70	8.04	7.42	6.79	6.43	6.01	5.68	5.36	5.17	5.09	4.80
Tularemia	9	9	1	9	1	0.06	0.05	0.03	0.04	0.05	0.05
Tyhoid fever	0.14	0.15	0.14	0.14	0.13	0.14	0.13	0.11	0.12	0.11	0.11
Vancomycin-intermediate						200		200	21.14		0.11
Staphylococcus aureus	1	1	1	1	9	1	7	9	1	-	0
Vancomycin-resistant											0
Staphylococcus aureus	1	1	1	9	1	1	1	1	1	0	0
Varicella (chickenpox)***	118.11	44.13	93.55	70.28	44.56	26.18	19.51	10.27	7.27	18.41	19.64
Yellow fever	-	0	_	_	0		-	0	0		

To help public health specialists monitor the impact of the new tetravalent meningococcal conjugate vaccine (Menactra[®], Sanofi-Pasteur, Swiftwater, Pennsylvania; licensed in the United States in January 2005), the data display for meningococcal disease was modified to differentiate the fraction of the disease that is potentially vaccine preventable (serogroups A, C, Y, W-135) from the nonvaccine-preventable fraction of disease (serogroup B and others).
 Severe acute respiratory syndrome—associated coronavirus disease.

^{***} Varicella was not a notifiable disease before 2003.

of notifiable diseases | United States 1009_2005

Disease	1998	1999	2000	2001	2002	2003	2004	2005
AIDS*	46,521	45,104	40.758	41,868	42,745	44,232	44,108	41,120†
Anthrax	4000	_	1	23	2	_	-	-
Botulism, total (including wound &								
unspecified)	116	154	138	155	118	129	133	135
foodborne	22	23	23	39	28	20	16	19
infant	65	92	93	97	69	76	87	85
Brucellosis	79	82	87	136	125	104	114	120
	189	143	78	38	67	54	30	179
Chancroid						877.478	929.462	976.445§
Chlamydia [¶]	604,420	656,721	702,093	783,242	834,555			
Cholera	17	6	5	3	2	2	5	8
Coccidioidomycosis	2,274	2,826	2,867	3,922	4.968	4,870	6,449	6,542
Cryptosporidiosis	3,793	2,361	3,128	3,785	3,016	3.506	3,577	5,659
Cyclosporiasis	**	56	60	147	156	75	171	543
Diphtheria	1	1	1	2	1	1	-	
Domestic arboviral diseases ^{††}								
California serogroup								
neuroinvasive		_	amond.	-	_	_	_	73
nonneuroinvasive	**	**	**	**	**	**	**	7
								,
eastern equine								21
neuroinvasive				**			**	21
nonneuroinvasive				**	-	**		_
Powassan								
neuroinvasive	_	-	_	_	_	-	_	1
nonneuroinvasive	**	**	**	**	**	**	**	_
St. Louis								
neuroinvasive	_	_	_	_	-		_	7
nonneuroinvasive	**	**	**	**	**	**	**	6
westen equine								
neuroinvasive								
	**	**	**	**	**	**	**	
nonneuroinvasive								_
West Nile								4 000
neuroinvasive			**			**	**	1,309
nonneuroinvasive	**	**	**	**		**	**	1,691
Ehrlichiosis								
human granulocytic	**	203	351	261	511	362	537	786
human monocytic	**	99 §§	200	142	216	321	338	506
human (other & unspecified)	**	§§	99	§§	99	99	§§	112
Encephalitis/Meningitis, arboviral								
California serogroup	97	70	114	128	164	108	112	99
eastern equine	4	5	3	9	10	14	6	11
	**	**	**	**	1	B	1	11
Powassan	0.4						,	11
St. Louis	24	4	2	79	28	41	12	11
West Nile	**		**		2,840	2.866	1,142	99
western equine	-	1	_	-		_	_	111
Enterohemorrhagic Escherichia coli	infection							
Shiga toxin-positive								
O157:H7	3,161	4,513	4,528	3,287	3,840	2,671	2,544	2,621
non-O157	0.0	***	**	171	194	252	316	501
not serogrouped	0.0	92	**	20	60	156	308	407
Giardiasis		***	**	20	21,206	19,709	20,636	19.733
Gonorrhea	355,642	360,076	358.995	361.705	351,852	335,104	330.132	339.593
		300,076	330,993	301,703	351,632	333,104	330.132	359,583
Haemophilus influenzae, invasive d		4 000	4 000	4 507	4 740	0.040	0.005	0.004
all ages, serotypes	1,194	1,309	1,398	1,597	1,743	2,013	2,085	2,304
age <5 yrs								
serotype b	8.6	**	**	**	34	32	19	9
nonserotype b	**	**	**	**	144	117	135	135
unknown serotype	**	99	**	**	153	227	177	217
Hansen disease (leprosy)	108	108	91	79	96	95	105	87
Hantavirus pulmonary syndrome	NA	33	41	8	19	26	24	26

Acquired immunodeficiency syndrome.

The total number of AIDS cases includes all cases reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) (proposed), through December 31, 2005.

Cases were updated through the Division of STD Prevention, NCHHSTP (proposed), as of May 5, 2005.

1 Chlamydia refers to genital infections caused by Chlamydia trachomatis.

" Not nationally notifiable.

1 Data provided by the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (NCZVED) (proposed) (ArboNET Surveillance), as of June 23, 2006.

Data on ehrlichiois attributable to other or unspecified agents were withheld from publication pending the outcome of discussions about the reclassification of certain *Ehrlichia* species, which probably could affect how data in this category are reported.

See also domestic arboviral disease incidence in this table for year 2005. In 2005, the domestic arboviral disease surveillance case definitions and categories were revised. The nationally notifiable arboviral encephalitis and meningitis conditions continued to be nationally notifiable in 2005, but under the category of arboviral neuroinvasive disease. In addition, in 2005, nonneuroinvasive domestic arboviral diseases for the six domestic arboviruses listed above were added to the list of nationally notifiable diseases.

TABLE 8. (Continued) Reported cases of notifiable diseases — United States 1998-2005

Disease	1998	1999	2000	2001	2002	2003	2004	2005
Hemolytic uremic syndrome, postdiarrheal Hepatitis, viral, acute***	119	181	249	202	216	178	200	221
A	23.229	17.047	13.397	10.609	8.795	7,653	5.683	4,488
В	10.258	7.694	8.036	7.843	7.996	7,526	6.212	5,119
C	3.518	3.111	3.197	3,976	1.835	1,102	720	652
Influenza-associated pediatric mortality	**	**	**	**	**	**	**	45
Legionellosis	1.355	1.108	1.127	1.168	1.321	2,232	2.093	2,301
Listeriosis	**	823	755	613	665	696	753	896
Lyme disease	16.801	16.273	17.730	17.029	23.763	21,273	19.804	23,305
Malaria	1,611	1.666	1,560	1,544	1,430	1,402	1,458	1,494
Measles	100	100	86	116	44	56	37	66
Meningococcal disease, invasive†††	100	100	00	110	44	30	37	00
all serogroups	2.725	2.501	2.256	2.333	1.814	1,756	1,361	1.245
serogroup A, C, Y, & W-135	6,120	2,501	2,200	2,000	1,014	1,750	1,301	297
serogroup B								156
other serogroup			_			_		27
	_	_	_	_	_	_	_	765
serogroup unknown Mumps	666	387	338	266	270	231	258	314
Pertussis	7,405	7,288	7,867	7,580	9,771	11,647	25,827	25,616
Plague	9	9	6	2	2	1	3	8
Poliomyelitis, paralytic ^{§§§}	3	2	47				-	1
Psittacosis	47	16	17	25	18	12	12	16
Q Fever	**	**	21	26	61	71	70	136
Rabies								
animal	7,259	6,730	6,934	7,150	7,609	6,846	6,345	5,915
human	1		4	1	3	2	7	2
Rocky Mountain spotted fever	365	579	495	695	1,104	1,091	1,713	1,936
Rubella	364	267	176	23	18	7	10	11
Rubella, congenital syndrome	7	9	9	3	1	1	-	1
Salmonellosis	43,694	40,596	39,574	40,495	44,264	43,657	42,197	45,322
SARS-CoV999	**	**	**	**	**	8	_	_
Shigellosis	23,626	17,521	22,922	20,221	23,541	23,581	14,627	16,168
Streptococcal disease,								
Streptococcal disease, invasive, group A	2,260	2.667	3,144	3,750	4,720	5,872	4.395	4.715
Streptococcal toxic-shock syndrome	58	65	83	77	118	161	132	129
Streptococcus pneumoniae,								
drug resistant, all ages	2.823	4.625	4.533	2.896	2.546	2,356	2.590	2,996
age <5 yrs	**	**	**	498	513	845	1.162	1,495
Syphilis							.,	.,
all stages	37.977	35.628	31.575	32.221	32.871	34,270	33,401	33.278****
congenital (age <1 yr)	801	556	529	441	412	413	353	329
primary & secondary	6.993	6.657	5.979	6,103	6.862	7.177	7.980	8.7249
Tetanus	41	40	35	37	25	20	34	27
Toxic-shock syndrome	138	113	135	127	109	133	95	90
Trichinellosis	19	12	16	22	14	6	5	16
Tuberculosis	18.361	17.531	16,377	15.989	15.075	14.874	14,517	14,097†††
Tularemia	10,301	17,551	142	129	90	129	134	154
	375	346	377	368	321	356	322	324
Typhoid fever	3/3	340	3//	300	321	330	322	324
Vancomycin-intermediate	**	**	**	**	**	**		0
Staphylococcus aureus							-	3
Vancomycin-resistant	**	**	**	**	**	**		-
Staphylococcus aureus							1	2
Varicella (chickenpox) \$555	82,455	46,016	27,382	22,536	22,841	20,948	32,931	32,242
Varicella (deaths) 11111	**	**	**	**	9	2	9	3
Yellow fever****	_	_	-	-	1	-	-	_

*** The anti-hepatitis C virus antibody test became available in May 1990. Data on hepatitis B, chronic; hepatitis B, perinatal infection; and hepatitis C, virus infection (past or present) are not included because they are undergoing data quality review.

To help public health specialists monitor the impact of the new meningococcal conjugate vaccine (Menactra®, licensed in the United States in January 2005), the data display for meningococcal disease was modified to differentiate the fraction of the disease that is potentially vaccine preventable (serogroups A, C, Y, W-135) from the nonvaccine-preventable fraction of disease (serogroup B and others).

SSS Cases of vaccine-associated paralytic poliomyelitis (VAPP) caused by polio vaccine virus. Numbers might not reflect changes based on retrospective case evaluations or late reports (CDC. Poliomyelitis—United States, 1975–1984. MMWR 1986;35:180–2).

Severe acute respiratory syndrome (SARS)-associated coronavirus disease. The total number of SARS-CoV cases includes all cases reported to the Division of Viral Diseases, Coordinating Center for Infectious Diseases (CCID) (proposed).

**** Totals reported to the Division of STD Prevention, NCHHSTP (proposed), as of May 5, 2006.

11111 Cases were updated through the Division of TB Elimination, NCHHSTP (proposed), as of May 12, 2005.

\$\$\$\$ Varicella was taken off the nationally notifiable disease list in 1991. Varicella again became nationally notifiable in 2003.

Death counts provided by the Division of Viral Diseases, National Center for Immunization and Respiratory Diseases (proposed), as of December 31, 2005.

***** The last indigenous case of yellow fever was reported in 1911; all other cases since 1911 have been imported.

TABLE 9. Reported cases of notifiable diseases — United States, 1990-1997

Disease	1990	1991	1992	1993	1994	1995	1996	1997
AIDS*	41,595	43,672	45,472	103,691	78,279	71,547	66,885	58,492
Amebiasis	3,328	2,989	2,942	2,970	2,983	†	†	1
Anthrax	_	_	1	_	_	_	_	_
Aseptic meningitis	11,852	14,526	12,223	12,848	8,932	†	†	1
Botulism, total (including wound & unspecifi	ed) 92	114	91	97	143	97	119	132
foodborne	23	27	21	27	50	24	25	31
infant	65	81	66	65	85	54	80	79
Brucellosis	82	104	105	120	119	98	112	98
Chancroid	4,212	3,476	1,886	1,399	773	606	386	243§
Chlamydia	1	†	†	1	†	477,638	498,884	526,671§
Cholera	6	26	103	18	39	23	4	6
Coccidioidomycosis	Ť	Ť	Ť	1	†	1,212	1,697	1,749
Cryptosporidiosis	Ť	Ť	†	Ť	†	2,970	2,827	2,566
Diphtheria	4	5	4	_	2	_	2	4
Encephalitis, primary	1,341	1,021 *	774	919	717	†	†	†
postinfectious	105	82	129	170	143	Ť	1	†
Encephalitis/Meningitis								
California serogroup viral	t	†	†	†	†	11	123	129
eastern equine	†	†	†	†	†	1	5	14
St. Louis	Ť	†	†	†	†	†	2	13
western equine	Ť	1	†	†	†	_	2	_
Escherichia coli 0157:H7	1	†	†	†	1,420	2,139	2,741	2,555
Gonorrhea	690,169	620,478	501,409	439,673	418,068	392,848	325,883	324,907§
Granuloma inguinale	97	29	6	19	3	†	t	†
Haemophilus influenzae, invasive disease	Ť	Ť	1,412	1,419	1,174	1,180	1,170	1,162
Hansen disease (leprosy)	198	154	172	187	136	144	112	122
Hantavirus pulmonary syndrome	Ť	Ť	Ť	†	†	_	NA	NA
Hemolytic uremic syndrome, postdiarrheal	1	†	t	†	†	72	97	91
Hepatitis, viral, acute								
A	31,441	24,378	23,112	24,238	26,796	31,582	31,032	30,021
В	21,102	18,003	16,126	13,361	12,517	10,805	10,637	10,416
C/non-A, non-B°*	2,553	3,582	6,010	4,786	4,470	4,576	3,716	3,816
unspecified	1,671	1,260	884	627	444	†	†	†
Legionellosis	1,370	1,317	1,339	1,280	1,615	1,241	1,198	1,163

* Acquired immunodeficiency syndrome.

† Not nationally notifiable.

§ Cases were updated through the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) (proposed).

Chlamydia refers to genital infections caused by Chlamydia trachomatis.

** The anti-hepatitis C virus antibody test became available in May 1990.

TABLE 9 (Continued) Reported cases of notifiable diseases — United States 1990–1997

Disease	1990	1991	1992	1993	1994	1995	1996	1997
Leptospirosis	77	58	54	51	38	t	t	†
Lyme disease	Ť	†	9.895	8,257	13.043	11,700	16,455	12,801
Lymphogranuloma venereum	277	471	302	285	235	†	†	†
Malaria	1,292	1,278	1,087	1,411	1,229	1,419	1.800	2,001
Measles	27,786	9,643	2,237	312	963	309	508	138
Meningococcal disease, invasive	2,451	2,130	2,134	2,637	2,886	3,243	3,437	3,308
Mumps	5,292	4,264	2,572	1,692	1,537	906	751	683
Murine typhus fever	50	43	28	25	†	†	†	†
Pertussis	4,570	2,719	4,083	6,586	4,617	5,137	7,796	6,564
Plague	2	11	13	10	17	9	5	4
Poliomyelitis, paralytic	6	10	6	4	8	7	7	6
Psittacosis	113	94	92	60	38	64	42	33
Rabies								
animal	4.826	6,910	8,589	9,377	8,147	7,811	6,982	8,105
human	1	3	1	3	6	5	3	2
Rheumatic fever, acute	108	127	75	112	112	†	†	†
Rocky Mountain spotted fever	651	628	502	456	465	590	831	409
Rubella	1,125	1,401	160	192	227	128	238	181
Rubella, congenital syndrome	11	47	11	5	7	6	4	5
Salmonellosis, excluding typhoid fever	48,603	48.154	40,912	41.641	43,323	45,970	45,471	41,901
Shigellosis	27,077	23,548	23,931	32,198	29,769	32,080	25,978	23,117
Streptococcal disease, invasive, group A	†	†	t	†	t	613	1,445	1,973
Streptococcal toxic-shock syndrome	†	t	Ť	†	Ť	10	19	33
Streptococcus pneumoniae, invasive								
disease drug-resistant, all ages	t	†	Ť	†	†	309	1,514	1,799
Syphilis, primary & secondary	50,223	42,935	33,973	26,498	20,627	16,500	11,387	8,550
total, all stages	134,255	128,569	112,581	101,259	81,696	68,953	52,976	46,540
Tetanus	64	57	45	48	51	41	36	50
Toxic-shock syndrome	322	280	244	212	192	191	145	157
Trichinellosis	129	62	41	16	32	29	11	13
Tuberculosis	25,701	26,283	26,673	25,313	24,361	22,860	21,337	19,851††
Tularemia	152	193	159	132	96	Ť	†	†
Typhoid fever	552	501	414	440	441	369	396	365
Varicella ^{§§}	173,099	147,076	158,364	134,722	151,219	120,624	83,511	98,727
Yellow fever 11	-	_	_	_	_	_	1	_

^{††} Cases were updated through the Division of TB Elimination, NCHHSTP (proposed). §§ Varicella was taken off the nationally notifiable disease list in 1991. Certain states continued to report these cases to CDC.

¹¹ The last indigenous case of yellow fever was reported in 1911; all other cases since 1911 have been imported.

TABLE 10. Reported cases of notifiable diseases* — United States, 1982-1989

Disease	1982	1983	1984	1985	1986	1987	1988	1989
AIDS†	9	9	4,445	8,249	12,932	21,070	31,001	33,722
Amebiasis	7.304	6,658	5,252	4,433	3,532	3,123	2,860	3,217
Anthrax	_	_	1	******		1	2	_
Aseptic meningitis	9,680	12,696	8,326	10,619	11,374	11,487	7.234	10,274
Botulism, total (including wound & un	specified) 97	133	123	122	109	82	84	89
foodborne	9	5	6	49	23	17	28	23
infant	§	5	9	70	79	59	50	60
Brucellosis	173	200	131	153	106	129	96	95
Chancroid	1,392	847	666	2,067	3,756	4.998	5,001	4,692
Cholera	continu	1	1	4	23	6	8	_
Diphtheria [¶]	2	5	1 -	3		3	2	3
Encephalitis, primary	1.464	1.761	1.257	1.376	1.302	1,418	882	981
postinfectious*°	36	34	108	161	124	121	121	88
Gonorrhea	960.633	900,435	878.556	911,419	900.868	780.905	719,536	733,151
Granuloma inquinale	17	24	30	44	61	22	11	7
Hansen disease (leprosy)	250	259	290	361	270	238	184	163
Hepatitis, viral, acute								
A	23,403	21,532	22.040	23,210	23,430	25,280	28,507	35,821
В	22,177	24,318	26,115	26,611	26.107	25,916	23,177	23,419
C/non-A, non-B ^{††}	9	9	3.871	4.184	3.634	2,999	2,619	2.529
unspecified	8.564	7.149	5.531	5.517	3.940	3.102	2.470	2.306
Legionellosis	654	852	750	830	980	1,038	1,085	1.190
Leptospirosis	100	61	40	57	41	43	54	93
Lymphogranuloma venereum	235	335	170	226	396	303	185	189
Malaria	1.056	813	1.007	1.049	1,123	944	1.099	1.277
Measles	1,714	1,497	2,587	2,822	6,282	3,655	3,396	18.193
Meningococcal disease, invasive	3,056	2.736	2.746	2,479	2,594	2,930	2.964	2.727
Mumps	5,270	3,355	3,021	2,982	7,790	12.848	4,866	5.712
Murine typhus fever	58	62	53	37	67	49	54	41
Pertussis	1,895	2,463	2.276	3.589	4,195	2.823	3,450	4.157
Plaque	19	40	31	17	10	12	15	4
Poliomyelitis, total	12	13	9	8	10	55	99	55
paralytic§§	12	13	9	8	10	9	9	11
Psittacosis	152	142	172	119	224	98	114	116
Rabies								
animal	6.212	5.878	5.567	5.565	5.504	4.658	4.651	4.724
human		2	3	1	_	1	_	1
Rheumatic fever, acute	137	88	117	90	147	141	158	144
Rocky Mountain spotted fever	976	1,126	838	714	760	604	609	623
Rubella	2.325	970	752	630	551	306	225	396
Rubella, congenital syndrome	7	22	5	_	14	5	6	3
Salmonellosis	40.936	44.250	40.861	65.347	49.984	50.916	48.948	47.812
Shigellosis	18.129	19.719	17.371	17.057	17.138	23.860	30,617	25.010
Syphilis, primary & secondary	33,613	32,698	28,607	27,131	27,883	35.147	40,117	44.540
total, all stages	75,579	74,637	69.888	67,563	68.215	86,545	103,437	110,797
Tetanus	88	91	74	83	64	48	53	53
Toxic-shock syndrome	9	6	482	384	412	372	390	400
Trichinosis	115	45	68	61	39	40	45	30
Tuberculosis	25.520	23.846	22.255	22.201	22,768	22,517	22,436	23,495
Tularemia	275	310	291	177	170	214	201	152
Typhoid fever	425	507	390	402	362	400	436	460
Varicella	167.423	177.462	221.983	178,162	183.243	213,196	192.857	185.441

* No cases of yellow fever were reported during 1982-1989.

† Acquired immunodeficiency syndrome.

§ Not nationally notifiable.

¶ Cutaneous diphtheria ceased being nationally notifiable after 1979.

** Beginning in 1984, data were recorded by date of record to state health departments. Before 1984, data were recorded by onset date.

†† The anti-hepatitis C virus antibody test became available in May 1990.

§§ No cases of paralytic poliomyelitis caused by wild virus have been reported in the United States since 1993.

TABLE 11. Reported cases of notifiable diseases* — United States, 1974-1981

Disease	1974	1975	1976	1977	1978	1979	1980	1981
Amebiasis	2,743	2,775	2,906	3.044	3,937	4,107	5,271	6,632
Anthrax	2	2	2		6	-	1	-
Aseptic meningitis	3,197	4,475	3,510	4,789	6,573	8,754	8,028	9,547
Botulism, total (including wound & un	specified) 28	20	55	129	105	45	89	103
Brucellosis	240	310	296	232	179	215	183	185
Chancroid	945	700	628	455	521	840	788	850
Cholera	_	_	-	3	12	1	9	19
Diphtheria	272	307	128	84	76	59	3	5
Encephalitis					-			
primary	1,164	4.064	1.651	1,414	1.351	1.504	1,362	1,492
postinfectious	218	237	175	119	78	84	40	43
Gonorrhea	906,121	999,937	1,001,994	1,002,219	1,013,436	1.004.058	1,004,029	990,864
Granuloma inguinale	47	60	71	75	72	76	51	66
Hansen disease (leprosy)	118	162	145	151	168	185	223	256
Hepatitis								
A (infectious)	40,358	35,855	33,288	31,153	29,500	30,407	29,087	25,802
B (serum)	10,631	13,121	14,973	16,831	15.016	15,452	19,015	21,152
unspecified	†	†	7.488	8.639	8.776	10,534	11.894	10,975
Legionellosis	†	†	235	359	761	593	475	408
Leptospirosis	8.351	93	73	71	110	94	85	82
Lymphogranuloma venereum	394	353	365	348	284	250	199	263
Malaria	293	373	471	547	731	894	2.062	1.388
Measles	22.094	24.374	41.126	57,345	26.871	13,597	13,506	3,124
Meningococcal disease, invasive	1,346	1.478	1.605	1.828	2,505	2,724	2,840	3,525
Mumps	59.128	59.647	38,492	21,436	16,817	14,225	8,576	4,941
Murine typhus fever	26	41	69	75	46	69	81	61
Pertussis	2.402	1,738	1,010	2,177	2.063	1.623	1,730	1,248
	2,402	20	1,010	18	12	13	1,730	1,240
Plague	7	13	10	19	8	22	9	10
Poliomyelitis, total	7	13	10	19	8	22	9	10
paralytic Psittacosis	164	49	78	94	140	137	124	136
Rabies	104	43	70	34	140	137	124	130
animal	3,151	2.627	3.073	3,130	3.254	5,119	6,421	7,118
	3,131	2,021	3,073	3,130	3,254	5,119	0,421	7,110
human	0.404				-		432	264
Rheumatic fever, acute	2,431	2,854	1,865	1,738	851	629		
Rocky Mountain spotted fever	754	844	937	1,153	1,063	1,070	1,163	1,192
Rubella	11,917	16,652	12,491	20,395	18,269	11,795	3,904	2,077
Rubella, congenital syndrome	45	30	30	23	30	62	50	19
Salmonellosis	21,980	22,612	22,937	27,850	29,410	33,138	33,715	39,990
Shigellosis	22,600	16,584	13,140	16,052	19,511	20,135	19,041	9,859
Syphilis					04.000			21 222
primary & secondary	25,385	25,561	23,731	20,399	21,656	24,874	27,204	31,266
total, all stages	83,771	80,356	71,761	64,621	64,875	67,049	68,832	72,799
Tetanus	101	102	75	87	86	81	95	72
Trichinosis	120	252	115	143	67	157	131	206
Tuberculosis§	30,122	33,989	32,105	30,145	28,521	27,669	27,749	27,373
Tularemia	144	129	157	165	141	196	234	288
Typhoid fever	437	375	419	398	505	528	510	584
Varicella	141,495	154,248	183,990	188,396	154,089	199,081	190,894	200,766

^{*}No cases of yellow fever were reported during 1974–1981.

†Not nationally notifiable.

§Case data after 1974 are not comparable with earlier years because of changes in reporting criteria that became effective in 1975.

TARLE 12 Deaths from selected nationally notifiable diseases* — United States, 2002–2003

Cause of death	ICD-10 cause of death code [†]	2002 no. of deaths	2002 CMR [§]	Rank of mortality count [¶]	2003 no. of deaths	2003 CMR [§]	Rank of mortality count [¶]
AIDS	B20-24	14,095	4.89	1	13,658	4.70	1
Coccidioidomycosis	B38	84	0.03	7	73	0.03	9
Hemolytic uremic syndrome	9,						
postdiarreheal	D59.3	35	0.01	12	29	0.01	15
Hepatitis, viral, acute							
A	B15	76	0.03	9	54	0.02	11
В	B16	659	0.23	4	583	0.20	4
C	B17.1	4,321	1.50	2	4,109	1.41	2
Influenza-associated pediat	tric						
mortality**	J10, J11	25	0.03	15	147	0.19	6
Legionellosis	A48.1	62	0.02	10	98	0.03	8
Listeriosis	A32	32	0.01	13	33	0.01	14
Malaria	B50-54	12	Off	18	††	Off	18
Meningococcal disease	A39	161	0.06	5	161	0.06	5
Pertussis	A37	18	0.0111	17	11	Off	17
Salmonellosis	A02	21	0.01	16	43	0.01	12
Streptococcal disease,							
invasive, group A	A40.0, A49.1, B95.0	109	0.04	6	115	0.04	7
Syphilis, total, all stages	A50-53	41	0.01	11	34	0.01	13
Toxic-shock syndrome	A48.3	78	0.03	8	71	0.02	10
Tuberculosis	A15-19	784	0.27	3	711	0.24	3
Varicella	B01	32	0.01	13	16	0.0199	16

Source: CDC. CDC WONDER Compressed Mortality files (http://wonder.cdc.gov/mortSQL.html) provided by the National Center for Health Statistics (NCHS). National Vital Statistics System (NVSS), 1999–2003. Underlying causes of death are classified according to ICD 10. Data for 2004–2005 are not available. Data are limited by the accuracy of the information regarding the underlying cause of death indicated on death certificates and reported to NVSS.

* Includes only causes of death corresponding to nationally notifiable infectious diseases with ≥10 deaths.

† World Health Organization. International Statistical Classification of Diseases and Related Health Problems. Tenth Revision, 1992.

§ Crude mortality rate per 100,000 population.

A rank of "1" indicates the highest number of deaths. The 2002 and 2003 total populations used to calculate incidence were 288,368,705 and 290,810,789, respectively.

** CDC WONDER staff provided the mortality counts and population data for 2002 and 2003 mortality rates. The population estimates for children aged <18 years for 2002 and 2003 were based on the NCHS bridged-race vintage 2003 national population estimates. For 2002 deaths, the population in the age group <18 years was 76,892,760. For 2003 deaths, the population in the age group <18 years was 77,138,460.

†† Includes unreliable CMR as a result of mortality counts of <10 deaths.

§§ Suppressed mortality count because the count was <10 deaths.

Selected Reading

General

9

- Adekoya N. Nationally notifable disease surveilance (NNDSS) and the *Healthy People 2010* objectives. The eJournal of the South Carolina Medical Association 2005;101:e68–72. Available at http://www.scmanet.org/Downloads/e-Journal/SCMA eJournal March05.pdf.
- Baker MG, Fidler DP. Global public health surveillance under new international health regulations. Emerg Infect Dis 2006;12:1058–65.
- Bayer R, Fairchild AL. Public health: surveillance and privacy. Science 2000;290:1898–9.
- CDC. Racial disparities in nationally notifiable diseases— United States, 2002. MMWR 2005;54:9–11.
- CDC. Progress in improving state and local disease surveillance— United States, 2000–2005. MMWR 2005;54:822–5.
- CDC. Case definitions for infectious conditions under public health surveillance. MMWR 1997;46(No. RR-10). Additional information available at http://www.cdc.gov/epo/dphsi/casedef/index.htm.
- CDC. Demographic differences in notifiable infectious disease morbidity—United States, 1992–1994. MMWR 1997;46:637–41.
- CDC. Framework for evaluating public health surveillance systems for early detection of outbreaks; recommendations from the CDC working group. MMWR 2004;53(No. RR-5).
- CDC. Framework for program evaluation in public health. MMWR 1999;48(No. RR-11).
- CDC. Historical perspectives: notifiable disease surveillance and notifiable disease statistics—United States, June 1946 and June 1996, MMWR 1996;45:530–6.
- CDC. Manual of procedures for the reporting of nationally notifiable diseases to CDC. Atlanta, GA: US Department of Health and Human Services, Public Health Service, CDC; 1995.
- CDC. Manual for the surveillance of vaccine-preventable diseases. 3rd ed. Atlanta, GA: US Department of Health and Human Services, Public Health Service, CDC; 2002. Available at http://www.cdc.gov/nip/publications/surv-manual.
- CDC. National Electronic Disease Surveillance System (NEDSS): a standards-based approach to connect public health and clinical medicine. J Public Health Management and Practice 2001;7:43–50.
- CDC. Public Health Information Network (PHIN): overview. Atlanta, GA: US Department of Health and Human Services, CDC; 2006. Available at http://www.cdc.gov/phin/overview.html.

- CDC. Reporting race and ethnicity data—National Electronic Telecommunications System for Surveillance, 1994–1997. MMWR 1999;48:305–12.
- CDC. Sexually transmitted disease surveillance, 2005. Atlanta, GA: US Department of Health and Human Services, CDC; 2006.
- CDC. Sexually transmitted diseases treatment guidelines, 2006. MMWR 2006;55(No. RR-11).
- CDC. Ten leading nationally notifiable infectious diseases— United States, 1995. MMWR 1996;45:883–4.
- CDC. Updated guidelines for evaluating public health surveillance systems: recommendations from the Guidelines Working Group. MMWR 2001;50(No. RR-13).
- CDC. Use of race and ethnicity in public health surveillance: summary of the CDC/ATSDR workshop. MMWR 1993;42(No. RR-10).
- Chang M-H, Glynn MK, Groseclose SL. Endemic, notifiable bioterrorism-related diseases, United States, 1992–1999. Emerg Infect Dis 2003;9:556–64.
- Chin JE, ed. Control of communicable diseases manual. 17th ed. Washington, DC: American Public Health Association; 2000.
- Doyle TJ, Glynn MK, Groseclose SL. Completeness of notifiable infectious disease reporting in the United States: an analytical literature review. Am J Epidemiol 2002;155: 866–74.
- Effler P, Ching-Lee M, Bogard A, Ieong M-C, Nekomoto T, Jernigan D. Statewide system of electronic notifiable disease reporting from clinical laboratories: comparing automated reporting with conventional methods. JAMA 1999;282:1845–50.
- Freimuth V, Linnan HW, Potter P. Communicating the threat of emerging infections to the public. Emerg Infect Dis 2000;6:337–47.
- German R. Sensitivity and predictive value positive measurements for public health surveillance systems. Epidemiology 2000;11:720–7.
- Government Accountability Office. Emerging infectious diseases: review of state and federal disease surveillance efforts. Washington, DC: Government Accountability Office; 2004. GAO-04-877. Available at http://www.gao.gov/new.items/d04877.pdf.
- Hopkins RS. Design and operation of state and local infectious disease surveillance systems. J Public Health Management Practice 2005;11:184–90.
- Jajosky RA, Groseclose SL. Evaluation of reporting timeliness of public health surveillance systems for infectious diseases. BMC Public Health 2004;4:29.

- Koo D, Caldwell B. The role of providers and health plans in infectious disease surveillance. Eff Clin Pract 1999;2:247–52. Available at http://www.acponline.org/journals/ecp/sepoct99/koo.htm.
- Koo D, Wetterhall S. History and current status of the National Notifiable Diseases Surveillance System. J Public Health Management Practice 1996;2:4–10.
- Krause G, Brodhun B, Altmann D, Claus H, Benzler J. Reliability of case definitions for public health surveillance assessed by Round-Robin test methodology. BMC Public Health 2006;6:129.
- Lin SS, Kelsey JL. Use of race and ethnicity in epidemiologic research: concepts, methodological issues, and suggestions for research. Epidemiol Rev 2000;22:187–202.
- Martin SM, Bean NH. Data management issues for emerging diseases and new tools for managing surveillance and laboratory data. Emerg Infect Dis 1995;1:124–8.
- McNabb S, Chungong S, Ryan M, et al. Conceptual framework of public health surveillance and action and its application in health sector reform. BMC Public Health 2002;2:2.
- McNabb S, Surdo A, Redmond A, et al. Applying a new conceptual framework to evaluate tuberculosis surveillance and action performance and measure the costs, Hillsborough County, Florida, 2002. Ann Epidemiol 2004;14:640–5.
- Niskar AS, Koo D. Differences in notifiable infectious disease morbidity among adult women—United States, 1992–1994. I Womens Health 1998;7:451–8.
- Panackal AA, M'ikanatha NM, Tsui FC, et al. Automatic electronic laboratory-based reporting of notifiable infectious diseases at a large health system. Emerg Infect Dis 2002:8:685–91.
- Pinner RW, Koo D, Berkelman RL. Surveillance of infectious diseases. In: Lederberg J, Alexander M, Bloom RB, eds. Encyclopedia of microbiology. 2nd ed. San Diego, CA: Academic Press; 2000.
- Pinner RW, Jernigan DB, Sutliff SM. Electronic laboratory-based reporting for public health. Mil Med 2000;165 (Suppl 2):20–4.
- Roush S, Birkhead G, Koo D, Cobb A, Fleming D. Mandatory reporting of diseases and conditions by health care professionals and laboratories. JAMA 1999;282:164–70.
- Silk, BJ, Berkelman RL. A review of strategies for enhancing the completeness of notifiable disease reporting. J Public Health Management Practice 2005;11:191–200.
- Teutsch SM, Churchill RE, eds. Principles and practice of public health surveillance. 2nd ed. New York, NY: Oxford University Press; 2000.
- Thacker SB, Choi K, Brachman PS. The surveillance of infectious diseases. JAMA 1983;249:1181–5.

AIDS

- CDC. HIV/AIDS surveillance report, 2005. Atlanta, GA: US Department of Health and Human Services, CDC, Vol. 17; 2006. Available at http://www.cdc.gov/hiv/stats/hasrlink.htm.
- CDC. Guidelines for national human immunodeficiency virus case surveillance, including monitoring for human immunodeficiency virus infection and acquired immunodeficiency syndrome. MMWR 1999;48(No. RR-13).
- Nakashima AK, Fleming PL. HIV/AIDS surveillance in the United States, 1981–2001. J Acquir Immune Defic Syndr 2003;32:68–85.

Anthrax

- CDC. Use of anthrax vaccine in response to terrorism: supplemental recommendations of the Advisory Committee on Immunization Practices. MMWR 2002;51:1024–6.
- Holty JE, Bravata DM, Liu H, Olshen RA, McDonald KM, Owens DK. Systematic review: a century of inhalational anthrax cases from 1900 to 2005. Ann Intern Med 2006;144:270–80.
- Howell JM, Mayer TA, Hanfling D, et al. Screening for inhalational anthrax due to bioterrorism: evaluating proposed screening protocols. Clin Infect Dis 2004;39:1842.
- Hugh-Jones M. 1996–97 global anthrax report. J Appl Microbiol 1999;87:189–91.
- Inglesby TV, O'Toole T, Henderson DA, et al. Anthrax as a biological weapon, 2002: updated recommendations for management. JAMA 2002;287:2236–52.
- Kyriacou DN, Stein AC, Yarnold PR, et al. Clinical predictors of bioterrorism-related inhalational anthrax. Lancet 2004;364(9432):449–52.

Botulism

- Angulo FJ, St. Louis ME. Botulism. In: Evans AS, Brachman PS, eds. Bacterial infections of humans. New York, NY: Plenum; 1998:131–53.
- CDC. Infant botulism—New York City, 2001–2002. MMWR 2003;52:21–4.
- Shapiro RL, Hatheway C, Becher J, Swerdlow DL. Botulism surveillance and emergency response: a public health strategy for a global challenge. JAMA 1997;278:433–5.
- Shapiro RL, Hatheway C, Swerdlow DL. Botulism in the United States: a clinical and epidemiologic review. Ann Intern Med 1998;129:221–8.
- Sobel J, Tucker N, McLaughlin J, Maslanka S. Foodborne botulism in the United States, 1999–2000. Emerg Infect Dis 2004;10:1606–12.
- Sobel J. Botulism. Clin Infect Dis 2005;41:1167-73.

Brucellosis

- CDC. Brucellosis (*Brucella melitensis, abortus, suis*, and *canis*). Atlanta, GA: US Department of Health and Human Services, CDC; 2005. Available at http://www.cdc.gov/ncidod/dbmd/diseaseinfo/brucellosis g.htm.
- CDC. Brucellosis case definition. Atlanta, GA: US Department of Health and Human Services, CDC; 2001. Available at http://www.bt.cdc.gov/Agent/Brucellosis/CaseDef.asp.
- CDC. Human exposure to *Brucella abortus* strain RB51— Kansas, 1997, MMWR 1998;47:172–5.
- Stevens, MG, Olsen SC, Palmer MV, Cheville NF. US Department of Agriculture, Agricultural Research Service National Animal Disease Center, Iowa State University. Brucella abortus strain RB51: a new brucellosis vaccine for cattle. Compendium 1997;19:766–74.
- Yagupsky P, Baron EJ. Laboratory exposures to *Brucellae* and implications for bioterrorism. Emerg Infect Dis 2005;11:1180-5.
- Chomel BB, DeBess EE, Mangiamele DM, et al. Changing trends in the epidemiology of human brucellosis in California from 1973 to 1992: a shift toward foodborne transmission. J Infect Dis 1994;170:1216–23.

Chancroid

- DiCarlo RP, Armentor BS, Martin DH. Chancroid epidemiology in New Orleans men. J Infect Dis 1995;172:446–52.
- Mertz KJ, Weiss JB, Webb RM, et al. An investigation of genital ulcers in Jackson, Mississippi, with use of a multiplex polymerase chain reaction assay: high prevalence of chancroid and human immunodeficiency virus infection. J Infect Dis 1998;178:1060–6.
- Mertz KJ, Trees D, Levine WC, et al. Etiology of genital ulcers and prevalence of human immunodeficiency virus coinfection in 10 US cities. The Genital Ulcer Disease Surveillance Group. I Infect Dis 1998;178:1795–8.

Chlamydia trachomatis, Genital Infection

- CDC. Sexually transmitted disease surveillance 2005 supplement: Chlamydia Prevalence Monitoring Project, annual report 2005. Atlanta, GA: US Department of Health and Human Services, CDC. In press.
- Gaydos CA, Howell MR, Pare B, et al. *Chlamydia trachomatis* infections in female military recruits. N Engl J Med 1998;339:739–44.
- Mertz KJ, McQuillian GM, Levine WC, et al. A pilot study of chlamydial infection in a national household survey. Sex Transm Dis 1998;25:225–8.

Miller WC, Ford CA, Handcock MS, et al. Prevalance of chlamydial and gonococcal infections among young adults in the United States. JAMA 2004;291:2229–36.

Cholera

- Steinberg EB, Greene KD, Bopp CA, Cameron DN, Wells JG, Mintz ED. Cholera in the United States, 1995–2000: trends at the end of the millennium. J Infect Dis 2001:184:799–802.
- World Health Organization. Cholera, 2005. Wkly Epidemiol Rec 2006;81:297–308.
- Mintz ED, Tauxe RV, Levine MM. The global resurgence of cholera. In: Noah ND, O'Mahony M, eds. Communicable disease epidemiology and control. Chichester, UK: John Wiley & Sons; 1998:63–104.
- CDC. Cholera epidemic associated with raw vegetables— Lusaka, Zambia, 2003–2004. MMWR 2004;53:783–6.
- CDC. Two cases of toxigenic Vibrio cholerae O1 infection after Hurricanes Katrina and Rita—Louisiana, October 2005. MMWR 2006;55:31–2.

Coccidioidomycosis

Park BJ, Sigel K, Vaz V et al. An epidemic of coccidioidomycosis in Arizona associated with climatic changes, 1998– 2001. J Infect Dis 2005;191:1981–7.

Cryptosporidiosis

- Hlavsa MC, Watson JC, Beach MJ. Cryptosporidiosis surveillance—United States 1999–2002. In: CDC Surveillance Summaries, January 28, 2005. MMWR 2005;54(No. SS-1): 1–8.
- Yoder JS, Blackburn BG, Craun GF, et al. Surveillance for waterborne-disease outbreaks associated with recreational water—United States, 2001–2002. In: CDC Surveillance Summaries, October 22, 2004. MMWR 2004;53(No. SS-8): 1–21.
- Roy SL, DeLong SM, Stenzel SA, et al. Risk factors for sporadic cryptosporidiosis among immunocompetent persons in the United States from 1999 to 2001. J Clin Microbiol 2004;42:2944–51.
- CDC. Diagnostic procedures for stool specimens; detection of parasite antigens. Atlanta, GA: US Department of Health and Human Services, CDC; 2004. Available at http://www.dpd.cdc.gov/dpdx/html/diagnosticprocedures.htm.

Cyclosporiasis

- Herwaldt BL. The ongoing saga of U.S. outbreaks of cyclosporiasis associated with imported fresh produce: what *Cyclospora cayetanensis* has taught us and what we have yet to learn. In: Institute of Medicine. Addressing foodborne threats to health: policies, practices, and global coordination. Washington, DC: The National Academies Press; 2006:85–115, 133–40. Available at http://newton.nap.edu/catalog/11745.html#toc.
- Herwaldt BL. *Cyclospora cayetanensis*: a review, focusing on the outbreaks of cyclosporiasis in the 1990s. Clin Infect Dis 2000;31:1040–57.

Diphtheria

Dewinter LM, Bernard KA, Romney MG. Human clinical isolates of *Corynebacterium diphtheriae* and *Corynebacterium ulcerans* collected in Canada from 1999 to 2003 but not fitting reporting criteria for cases of diphtheria. Clin Microbiol 2005;43:3447–9.

Domestic Arboviral Diseases, Neuroinvasive and Nonneuroinvasive

- CDC. Revision of guidelines for surveillance, prevention, and control of West Nile virus infection. MMWR 2003;52:797.
- CDC. West Nile virus activity—United States, January 1—December 1, 2005. MMWR 2005;54:1253–6.
- Hayes EB, Komar N, Nasci RS, et al. Epidemiology and transmission dynamics of West Nile virus disease. Emerg Infect Dis 2005;11:1167–73.
- CDC. Eastern equine encephalitis—New Hampshire and Massachusetts, August-September 2005. MMWR 2006;55:697-700.

Enterohemorrhagic Escherichia coli

- Bender JB, Hedberg CW, Besser JM, et al. Surveillance for Escherichia coli O157:H7 infections in Minnesota by molecular subtyping. N Engl J Med 1997;337:388–94.
- Brooks JT, Sowers EG, Wells JB, et al. Non-O157 Shiga toxin-producing *Escherichia coli* infections in the United States, 1983–2002. J Infect Dis 2005;192:1422–9.
- Crump JA, Sulka AC, Langer AJ, et al. An outbreak of *Escherichia coli* O157:H7 among visitors to a dairy farm. N Engl J Med 2002;347:555–60.
- Griffin PM, Mead PS, Sivapalasingam S. *Escherichia coli* O157:H7 and other enterohemorrhagic *E. coli*. In: Blaser MJ, Smith PD, Ravdin JI, Greenberg HB, Guerrant RL, eds. Infections of the gastrointestinal tract. Philadelphia, PA: Lippincott Williams & Wilkins; 2002:627–42.
- Mead PS, Griffin PM. Escherichia coli O157:H7. Lancet 1998;352:1207-12.

Ehrlichiosis (Human Granulocytic and Human Monocytic)

- CDC. Diagnosis and management of tickborne rickettsial diseases: Rocky Mountain spotted fever, rhrlichioses, and anaplasmosis—United States. MMWR 2006;55(No. RR-4).
- Demma LJ, Holman RC, McQuiston JH, Krebs JW, Swerdlow DL. Epidemiology of human ehrlichiosis and anaplasmosis in the United States, 2001–2002. Am J Trop Med Hyg 2005;73:400–9.
- Paddock CD, Childs JE. *Ehrlichia chaffeensis*: a prototypical emerging pathogen [Review]. J Clin Microbiol 2003;16: 37–64.
- IJdo JW, Meek JI, Cartter ML, et al. The emergence of another tick-borne infection in the 12-town area around Lyme, Connecticut: human granulocytic ehrlichiosis. J Infect Dis 2000;181:1388–93.

Giardiasis

- Hlavsa MC, Watson JC, Beach MJ. Giardiasis surveillance— United States, 1998–2002. In: CDC Surveillance Summaries, January 28, 2005. MMWR 2005;54(No. SS-1):9–16.
- Blackburn BG, Craun GF, Yoder JS et al. Surveillance for water-borne-disease outbreaks associated with drinking water—United States, 2001–2002. In: CDC Surveillance Summaries, October 22, 2004. MMWR 2004;53(No. SS-8): 23–45.
- Stuart JM, Orr HJ, Warburton FG, et al. Risk factors for sporadic giardiasis: a case-control study in Southwestern England. Emerg Infect Dis 2003;9:229–33.
- CDC. Diagnostic procedures for stool specimens; detection of parasite antigens. Atlanta, GA: US Department of Health and Human Services, CDC; 2004. Available at http://www.dpd.cdc.gov/dpdx/html/diagnosticprocedures.htm.

Gonorrhea

- CDC. Increases in fluoroquinolone-resistant *Neisseria* gonorrhoeae among men who have sex with men—United States, 2003, and revised recommendations for gonorrhea treatment, 2004. MMWR 2004;53:335–8.
- CDC. Sexually transmitted diseases treatment guidelines, 2006. MMWR 2006;55(No. RR-11).
- CDC. Sexually transmitted diseases surveillance 2005 supplement: Gonococcal Isolate Surveillance Project (GISP) annual report 2005. Atlanta, GA: US Department of Health and Human Services, CDC. In press.

Haemophilus influenzae, Invasive Disease

CDC. Progress toward elimination of *Haemophilus influenzae* type b disease among infants and children—United States, 1998–2000. MMWR 2002;51:234–7.

Fry AM, Lurie P, Gidley M, Schmink S, Lingappa J, Rosenstein NE. *Haemophilus influenzae* type b (Hib) disease among Amish children in Pennsylvania: reasons for persistent disease. Pediatrics 2001;108:1–6.

Hansen Disease (Leprosy)

- Britton WJ, Lockwood NJ. Leprosy. Lancet 2004;363:1209–19.
 Hartzell JD, Zapor M, Peng S, Straight T. Leprosy: a case series and review. South Med J 2004;97:1252–6.
- Hastings R, Ed. Leprosy. 2nd ed. New York, NY: Churchill Livingstone; 1994.
- Joyce MP, Scollard DM. Leprosy (Hansen's disease). In: Rakel RE, Bope ET, eds. Conn's current therapy 2004: latest approved methods of treatment for the practicing physician. 56th ed. Philadelphia, PA: Saunders; 2004:100–5.
- Ooi WW, Moschella SL. Update on leprosy in immigrants in the United States: status in the year 2000. Clin Infect Dis 2001;32:930–7.
- Bruce S, Schroeder TL, Ellner K, Rubin H, Williams T, Wolf JE Jr. Armadillo exposure and Hansen's disease: an epidemiologic survey in southern Texas. J Am Acad Dermatol 2000;43(2 Pt1):223–8.

Hantavirus Pulmonary Syndrome

CDC. Hantavirus pulmonary syndrome—five states, 2006. MMWR 2006;55:627–9.

Hemolytic Uremic Syndrome, Postdiarrheal

- Banatvala N, Griffin PM, Greene KED, et al. The United States Prospective Hemolytic Uremic Syndrome Study; microbiologic, serologic, clinical, and epidemiologic findings. J Infect Dis 2001;183:1063–70.
- Mahon BE, Griffin PM, Mead PS, Tauxe RV. Hemolytic uremic syndrome surveillance to monitor trends in infection with *Escherichia coli* O157:H7 and other Shiga toxin-producing *E. coli* [Letter]. Emerg Infect Dis 1997;3: 409–12.

Hepatitis A

- Armstrong GL, Bell BP. Hepatitis A virus infections in the United States: model-based estimates and implications for childhood immunization. Pediatrics 2002;109:839–45.
- Bell BP, Kruszon-Moran D, Shapiro CN, Lambert SB, McQuillan GM, Margolis HS. Hepatitis A virus infection in the United States: serologic results from the Third National Health and Nutrition Examination Survey. Vaccine 2005;23:5798–806.
- CDC. Prevention of hepatitis A through active or passive immunization: recommendations of the Advisory Committee on Immunization Practices. MMWR 2006;55(No. RR-7).

- Wasley A, Samandari T, Bell BP. Incidence of hepatitis A in the United States in the era of vaccination. JAMA 2005;294:194–201.
- Wasley A, Fiore A, Bell BP. Hepatitis A in the era of vaccination. Epidemiol Rev 2006;28:101–11.

Hepatitis B

- Armstrong GL, Mast EE, Wojczynski M, Margolis HS. Childhood hepatitis B virus infections in the United States before hepatitis B immunization. Pediatrics 2001;108:1123–8.
- CDC. Hepatitis B virus: a comprehensive strategy for eliminating transmission in the United States through universal childhood vaccination: recommendations of the Immunization Practices Advisory Committee (ACIP). MMWR 1991;40(No. RR-13).
- CDC. A comprehensive immunization strategy to eliminate transmission of hepatitis B virus infection in the United States: recommendations of the Advisory Committee on Immunization Practices (ACIP). Part 1: immunization of infants, children, and adolescents. MMWR 2005;54 (No. RR-16).
- CDC. A comprehensive strategy to eliminate transmission of hepatitis B virus infection in the United States: recommendations of the Advisory Committee on Immunization Practices (ACIP). Part II: immunization of adults. MMWR 2006;55(No. RR-16).
- Shepard CW, Simard EP, Finelli L, Fiore A, Bell BP. Hepatitis B virus infection: epidemiology and vaccination. Epidemiol Rev 2006;28:112–25.
- Goldstein ST, Alter MJ, Williams IT, et al. Incidence and risk factors for acute hepatitis B in the United States, 1982–1998: implications for vaccination programs. J Infect Dis 2002;185:713–9.
- McQuillan GM, Coleman PJ, Kruszon-Moran D, Moyer LA, Lambert SB, Margolis HS. Prevalence of hepatitis B virus infection in the United States: The National Health and Nutrition Examination Surveys, 1976 through 1994. Am J Public Health 1999;89:14–8.

Hepatitis C

- Armstrong GL, Wasley A, Simard EP, McQuillan GM, Kuhnert WL, Alter MJ. The prevalence of hepatitis C virus infection in the United States, 1999 through 2002. Ann Intern Med 2006;144):705–14.
- Armstrong GA, Alter MJ, McQuillan GM, Margolis HS. The past incidence of hepatitis C virus infection: implications for the future burden of chronic liver disease in the United States. Hepatology 2000;31:777–82.

- CDC. Recommendations for prevention and control of hepatitis C virus (HCV) infection and HCV-related chronic disease. MMWR 1998;47(No. RR-19).
- Shepard CW, Finelli L, Alter MJ. The global epidemiology of hepatitis C. Lancet Infect Dis 2005;5:558–67.

Influenza-Associated Pediatric Mortality

- Bhat N, Wright JG, Broder KR, et al. Influenza-associated deaths among children in the United States, 2003–2004. N Engl J Med 2005;352:2559–67.
- CDC. Update: Influenza-associated deaths reported among children aged <18 years—United States, 2003–04 influenza season. MMWR 2004;52:1254–5.
- CDC. Update: influenza-associated deaths reported among children aged <18 years—United States, 2003–04 influenza Season. MMWR 2004;52:1286–8.
- CDC. Mid-year addition of influenza-associated pediatric mortality to the list of nationally notifiable diseases, 2004. MMWR 2004;53:951–2.
- CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2006;55(No. RR-10).
- Council of State and Territorial Epidemiologists. Influenzaassociated pediatric mortality, 2004. Atlanta, GA: Council of State and Territorial Epidemiologists; 2004. Available at http://www.cste.org/PositionStatementsResolutions2.htm.
- Council of State and Territorial Epidemiologists. Position statement 04-ID-04: influenza-associated pediatric mortality 2004. Atlanta, GA: Council of State and Territorial Epidemiologists; 2004. Available at http://www.cste.org/ps/2004pdf/04-ID-04-final.pdf.
- Guarner J, Paddock CD, Shieh WJ, et al. Histopathologic and immunohistochemical features of fatal influenza virus infection in children during the 2003–2004 season. Clin Infect Dis 2006:43;132–40.

Legionellosis

- Cowgill KD, Lucas CE, Benson RF, et al. Recurrence of legionnaires disease at a hotel in the United States Virgin Islands over a 20-year period. Clin Infect Dis 2005;40:1205–7.
- Fields BS, Benson RF, Besser RE. *Legionella* and Legionnaires' disease: 25 years of investigation. Clin Microbiol Rev 2002;15:506–26.
- European Working Group on *Legionella* Infections. European guidelines for control and prevention of travel associated Legionnaires' disease. London, UK: United Kingdom Health Protection Agency; 2005.
- Joseph CA. Legionnaires' disease in Europe 2000–2002. Epidemiol Infect 2004;132:417–24.

Marston BJ, Lipman HB, Breiman RF. Surveillance for Legionnaires' disease: risk factors for morbidity and mortality. Arch Intern Med 1994;154:2417–22.

Listeriosis

- Gottlieb SL, Newbern EC, Griffin PM, et al. Multistate outbreak of listeriosis linked to turkey deli meat and subsequent changes in US regulatory policy. Clin Infect Dis 2006;42:29–36.
- Mead PS, Dunne EF, Graves L, et al. Nationwide outbreak of listeriosis due to contaminated meat. Epidemiol Infect 2006;134:744–51.
- Mead PS, Slutsker L, Dietz V, et al. Food-related illness and death in the United States. Emerg Infect Dis 1998;5: 607–25.
- Slutsker L, Schuchat A. Listeriosis in humans. In: Ryser ET Marth EH, eds. *Listeria*, listeriosis, and food safety. 2nd ed. New York, NY: Marcel Dekker, Inc.; Little, Brown and Company; 1999:75–95.
- Tappero J, Schuchat A, Deaver K, Mascola L, Wenger J, for the Listeriosis Study Group. Reduction in the incidence of human listeriosis in the United States: effectiveness of prevention efforts. JAMA 1995;273:1118–22.

Lyme Disease

- Stafford KC III. Tick management handbook: an integrated guide for homeowners, pest control operators, and public health officials for the prevention of tick-associated disease. New Haven, CT: Connecticut Agricultural Experiment Station; 2004. Available at http://www.cdc.gov/ncidod/dvbid/lyme/resources/handbook.pdf.
- Hayes EB, Piesman J. How can we prevent Lyme disease? N Engl J Med 2003;348:2424–30.
- Aguero-Rosenfeld ME, Wang G, Schwartz I, Wormser GP. Diagnosis of Lyme borreliosis. Clin Microbiol Rev 2005;18:484–509.
- Medical Letter. Treatment of Lyme disease. Med Lett Drugs Ther 2005;47:41–3.
- CDC. Caution regarding testing for Lyme disease. MMWR 2005;54:125.

Malaria

- Baird JK. Effectiveness of antimalarial drugs. N Engl J Med 2005;352:1565–77.
- Chen LH, Keystone JS. New strategies for the prevention of malaria in travelers. Infect Dis Clin N Amer 2005;19: 185–210.
- Guinovart C, Navia MM, Tanner M, et al. Malaria: burden of disease. Curr Mol Med 2006;6:137–40.
- Leder K, Black J, O'Brien D, et al. Malaria in travelers: a review of the GeoSentinel Surveillance Network. Clin Infect Dis 2004;39:1104–12.

Skarbinski J, Eliades MJ, Causer LM, et al. Malaria surveillance—United States, 2004. In: CDC Surveillance Summaries, May 26, 2006. MMWR 2006;55(No. SS-4):23–37.

Measles

- Papania M, Hinman A, Katz S, Orenstein W, McCauley M, eds. Progress toward measles elimination—absence of measles as an endemic disease in the United States. J Infect Dis 2004;189(Suppl 1):S1–257.
- CDC. National, state, and urban area vaccination levels among children aged 19–35 months—United States, 2002. MMWR 2003;52:728–32.
- Rota PA, Liffick SL, Rota JS, et al. Molecular epidemiology of measles viruses in the United States, 1997–2001. Emerg Infect Dis 2002;8:902–8.
- De Serres G, Gay NJ, Farrington CP. Epidemiology of transmissible diseases after elimination. Am J Epidemiol 2000;151:1039–48.

Meningococcal Disease

- CDC. Prevention and control of meningococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2005;54(No. RR-7).
- Rosenstein NE, Perkins BA, Stephens DS, et al. Meningococcal disease. N Engl J Med 2001;344:1378–88.
- Rosenstein NE, Perkins BA, Stephens DS, et al. The changing epidemiology of meningococcal disease in the United States, 1992–1996. J Infect Dis 1999;180:1894–901.

Mumps

- Harling R, White JM, Ramsay ME, et al. The effectiveness of the mumps component of the MMR vaccine: a case control study. Vaccine 2005;23:4070–4.
- CDC. Mumps outbreak at a summer camp—New York, 2005. MMWR 2006;55:175–7.

Pertussis

- Bisgard KM, Rhodes P, Connelly BL, et al. Pertussis vaccine effectiveness among children 6 to 59 months of age in the United States, 1998–2001. Pediatrics 2005;116:e285–94.
- Bisgard KM, Pascual FB, Ehresmann KR, et al. Infant pertussis: who was the source? Pediatr Infect Dis J 2004;23:985–9.
- CDC. Preventing tetanus, diphtheria, and pertussis among adolescents; use of tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccines: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2006;55(No. RR-3).
- CDC. Recommended antimicrobial agents for the treatment and postexposure prophylaxis of pertussis: 2005 CDC guidelines. MMWR 2005;54(No. RR-14).

- CDC. Pertussis—United States, 2001–2003. MMWR 2005;54:1283–6.
- Lee GM, Lebaron C, Murphy TV, Lett S, Schauer S, Lieu TA. Pertussis in adolescents and adults: should we vaccinate? Pediatrics 2005;115:1675–84.
- CDC. Preventing tetanus, diphtheria, and pertussis among adults: use of tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccine (Tdap): recommendations of the Advisory Committee on Immunization Practices (ACIP) and recommendation of ACIP, supported by the Healthcare Infection Control Practices Advisory Committee (HICPAC), for use of Tdap among health-care personnel. MMWR 2006;55(No. RR-17).

Plague

- CDC. Imported plague—New York City, 2002. MMWR 2003;53:725–8.
- Enscore RE, Biggerstaff BJ, Brown TL, et al. Modeling relationships between climate and the frequency of human plague cases in the southwestern United States, 1960–1997.
 Am J Trop Med Hyg 2002;66:186–96.
- Inglesby TV, Dennis DT, Henderson DA, et al. Plague as a biological weapon: medical and public health management. Working Group on Civilian Biodefense [Review]. JAMA 2000;283:2281–90.
- Dennis DT, Gage KL, Gratz N, Poland JD, Tikhomirov E. Plague manual: epidemiology, distribution, surveillance and control. Geneva, Switzerland: World Health Organization; 1999.

Poliomyelitis

- CDC. Imported vaccine-associated paralytic poliomyelitis— United States, 2005. MMWR 2006;55:97–9.
- CDC. Poliovirus infections in four unvaccinated children—Minnesota, August-October 2005. MMWR 2005; 54:1053–5.
- CDC. Poliomyelitis prevention in the United States: updated recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2000;49(No. RR-5).
- Alexander LN, Seward JF, Santibanez TA, et al. Vaccine policy changes and epidemiology of polio in the United States. JAMA 2004;292:1696–702.
- CDC. Progress toward interruption of wild poliovirus transmission—worldwide, January 2005–March 2006. MMWR 2006;55:458–62.
- Kew OM, Sutter RW, de Gourville EM, Dowdle WR, Pallansch MA. Vaccine-derived polioviruses and the endgame strategy for global polio eradication. Annu Rev Microbiol 2005; 59:587–635.

Q Fever

- McQuiston JH, Holman RC, McCall CL, Childs JE, Swerdlow DL, Thompson HA. National surveillance and the epidemiology of Q fever in the United States, 1978–2004. Am J Trop Med Hyg 2006;75:36–40.
- Mcquiston JH, Nargund VN, Miller JD, Priestly R, Shaw EI, Thompson HA. Prevalence of antibodies to *Coxiella burnetii* among veterinary school dairy herds in the United States, 2003. Vector Borne Zoonotic Dis 2005;5:90–1.
- Raoult D, Tissot-Dupont H, Foucault C, et al. Q fever 1985– 1998. Clinical and epidemiologic features of 1,383 infections [Review]. Medicine 2000;79:109–25.
- Bernard KW, Parham GL, Winkler WG, Helmick CG. Q fever control measures: recommendations for research facilities using sheep. Infect Control 1982;3:461–5.

Rabies, Animal and Human

- CDC. Compendium of animal rabies prevention and control, 2005: National Association of State and Territorial Public Health Veterinarians, Inc. MMWR 2005;54(No. RR-3).
- CDC. Human rabies prevention—United States, 1999: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1999;48(No. RR-1).
- Krebs JW, Mandel EJ, Swerdlow DL, Rupprecht CE. Rabies surveillance in the United States during 2004. J Am Vet Med Assoc 2005;227:1912–25.

Rocky Mountain Spotted Fever

- CDC. Diagnosis and management of tickborne rickettsial diseases: Rocky Mountain spotted fever, ehrlichioses, and anaplasmosis—United States. MMWR 2006;55(No. RR-4).
- Chapman AS, Murphy SM, Demma LJ, et al. Rocky Mountain spotted fever in the United States, 1997–2002. Vector Borne Zoonotic Dis 2006;6:170–8.
- Demma LJ, Traeger MS, Nicholson WL, et al. Rocky Mountain spotted fever from an unexpected tick reservoir in Arizona. N Engl J Med 2005;353:587–94.
- CDC. Fatal cases of Rocky Mountain spotted fever in family clusters—three states, 2003. MMWR 2004;53:407–10.
- Thorner AR, Walker DH, Petri WA. Rocky Mountain spotted fever [Review]. Clin Infect Dis 1998;27:1353-60.

Rubella

CDC. Control and prevention of rubella: evaluation and management of suspected outbreaks, rubella in pregnant women, and surveillance for congenital rubella syndrome. MMWR 2001;50(No. RR-12).

- Danovaro-Holliday MC, Gordon E, Woernle C, et al. Identifying risk factors for rubella susceptibility in a population at risk in the United States. Am J Public Health 2003;93:289–91.
- Reef SE, Frey TK, Theall K, et al. The changing epidemiology of rubella in the 1990s: on the verge of elimination and new challenges for control and prevention. JAMA 2002;287;464–72.
- Reef S, Plotkin S, Cordero J, et al. Preparing for congenital rubella syndrome elimination: summary of the Workshop on Congenital Rubella Elimination in the United States. Clin Infect Dis 2000;31:85–95.

Salmonellosis

- Braden CR. Salmonella enterica serotype Enteritidis and eggs: a national epidemic in the United States. Clin Infect Dis 2006;43:512–7.
- Olsen SJ, Bishop R, Brenner FW, et al. The changing epidemiology of *Salmonella*: trends in serotypes isolated from humans in the United States, 1987–1997. J Infect Dis 2001;183:756–61.
- Voetsch AC, Van Gilder TJ, Angulo FJ, et al. FoodNet estimate of burden of illness caused by nontyphoidal *Salmonella* infections in the United States. Clin Infect Dis 2004;38(Suppl 3):S127–34.

Shigellosis

- Shane A, Crump J, Tucker N, Painter J, Mintz E. Sharing *Shigella*: risk factors and costs of a multi-community outbreak of shigellosis. Arch Pediatr Adolesc Med 2003;157:601–3.
- CDC. Outbreaks of multidrug-resistant *Shigella sonnei* gastroenteritis associated with day care centers—Kansas, Kentucky, and Missouri, 2005. MMWR 2006;55:1068–71.
- Gupta A, Polyak CS, Bishop RD, Sobel J, Mintz ED. Laboratory-confirmed shigellosis in the United States, 1989–2002: epidemiologic trends and patterns. Clin Infect Dis 2004;38:1372–7.
- Sivapalasingam S, Nelson JM, Joyce K, Hoekstra M, Angulo FJ, Mintz ED. A high prevalence of antimicrobial resistance among *Shigella* isolates in the United States, 1999–2002. Antimicrob Agents Chemother 2006;50:49–54.

Streptococcal Disease, Invasive, Group A

CDC. Active Bacterial Core Surveillance report. Emerging Infections Program Network. Group A streptococcus, 2005-provisional. Atlanta, GA: US Department of Health and Human Services, CDC; 2006. Available at http://www.cdc.gov/ncidod/dbmd/abcs/survreports/gas05prelim.pdf.

- CDC. Investigating clusters of group A streptococcal disease. Atlanta, GA: US Department of Health and Human Services, CDC; 2005. Available at http://www2.cdc.gov/ncidod/dbmd/abcs/calc/calc_new/new_page.htm.
- Bisno AL, Rubin FA, Cleary PP, Dale JB. National Institute of Allergy and Infectious Diseases. Prospects for a group A streptococcal vaccine: rationale, feasibility, and obstacles: report of a National Institute of Allergy and Infectious Diseases workshop. Clin Infect Dis 2005;41:1150–6.
- O'Brien KL, Beall B, Barrett NL, et al. Epidemiology of invasive group A streptococcus disease in the United States, 1995–1999. Clin Infect Dis 2002;35:268–76.
- The Prevention of Invasive Group A Streptococcal Infections Workshop Participants. Prevention of invasive group A streptococcal disease among household contacts of case patients and among postpartum and postsurgical patients: recommendations from the Centers for Disease Control and Prevention. Clin Infect Dis 2002;35:950–9.

Streptococcal Toxic-Shock Syndrome

- Bisno AL. Brito MO. Collins CM. Molecular basis of group A streptococcal virulence. Lancet Infect Dis 2003;3:191–200.
- O'Brien KL, Beall B, Barrett NL, et al. Epidemiology of invasive group A streptococcus disease in the United States, 1995–1999. Clin Infect Dis 2002;35:268–76.
- Stevens DL. Streptococcal toxic shock syndrome associated with necrotizing fasciitis. Annu Rev Med 2000;51:271–88.
- The Prevention of Invasive Group A Streptococcal Infections Workshop Participants. Prevention of invasive group A streptococcal disease among household contacts of case patients and among postpartum and postsurgical patients: recommendations from the Centers for Disease Control and Prevention. Clin Infect Dis 2002;35:950–9.

Streptococcus pneumoniae, Invasive, Drug-Resistant

- CDC. Preventing pneumococcal disease among infants and young children: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2000;49(No. RR-9).
- Clinical and Laboratory Standards Institute. Performance standards for antimicrobial susceptibility testing: 15th informational supplement [No. M100-S15]. Wayne, PA: National Committee for Clinical Laboratory Standards; 2005.
- Flannery B, Schrag S, Bennett NM, et al. Impact of childhood vaccination on racial disparities in invasive *Streptococcus pneumoniae* infections. JAMA 2004;291:2197–203.

- Kyaw MH, Lynfield R, Schaffner W, et al. Effect of introduction of the pneumococcal conjugate vaccine on drugresistant *Streptococcus pneumoniae*. N Engl J Med 2006;354:1455–63.
- Poehling KA, Talbot TR, Griffin MR, et al. Invasive pneumococcal disease among infants before and after introduction of pneumococcal conjugate vaccine. JAMA 2006;295:1668–74.
- Ray GT, Whitney CG, Fireman BH, Ciuryla V, Black SB. Cost-effectiveness of pneumococcal conjugate vaccine: evidence from the first 5 years of use in the United States incorporating herd effects. Pediatr Infect Dis J 2006;25: 494–501.

Syphilis, Congenital

CDC. Congenital syphilis—United States, 2002. MMWR 2004;53:716–9.

Syphilis, Primary and Secondary

- CDC. The National Plan to Eliminate Syphilis from the United States. Atlanta, GA: US Department of Health and Human Services, CDC; 1999.
- CDC. The National Plan to Eliminate Syphilis from the United States. Atlanta, GA: US Department of Health and Human Services, CDC; 2006.
- CDC. Primary and secondary syphilis—United States, 2003–2004. MMWR 2006;55:269–73.
- CDC Sexually transmitted disease surveillance supplement 2005; syphilis surveillance report. Atlanta, GA: US Department of Health and Human Services, CDC. In press.

Tetanus

- Pascual FB, McGinley EL, Zanardi LR, Cortese MM, Murphy TV. Tetanus surveillance—United States, 1998–2000. In: CDC Surveillance Summaries, June 20, 2003. MMWR 2003;52(No. SS-3).
- CDC. Tetanus—Puerto Rico, 2002. MMWR 2002;51:613–5. McQuillan GM, Kruszon-Moran D, Deforest A, Chu SY, Wharton M. Serologic immunity to diphtheria and tetanus in the United States. Ann Intern Med 2002;136:660–6.

Trichinellosis

- CDC. Trichinellosis associated with bear meat—New York and Tennessee, 2003. MMWR 2004;53:606–10.
- Roy SL, Lopez AS, Schantz PM. Trichinellosis surveillance— United States, 1997–2001. In: CDC Surveillance Summaries, July 25, 2003. MMWR 2003;52(No. SS-6).

- Moorhead A, Grunenwald PE, Dietz VJ, Schantz PM. Trichinellosis in the United States, 1991–1996: declining but not gone. Am J Trop Med Hyg 1999;60:66–9.
- CDC. Outbreak of trichinellosis associated with eating cougar jerky—Idaho, 1995. MMWR 1996;45:205-6.

Tuberculosis

- CDC. Reported tuberculosis in the United States, 2003. Atlanta, GA: US Department of Health and Human Services, CDC; 2004. Available at http://www.cdc.gov/nchstp/tb.
- CDC. Trends in tuberculosis—United States, 2004. MMWR 2005;54:245–9.
- Saraiya M, Cookson ST, Tribble P, et al. Tuberculosis screening among foreign-born persons applying for permanent US residence. Am J Public Health 2002;92:826–9.
- Talbot EA, Moore M, McCray E, Binkin NJ. Tuberculosis among foreign-born persons in the United States, 1993–1998. JAMA 2000;284:2894–900.

Tularemia

- CDC. Outbreak of tularemia among commercially distributed prairie dogs, 2002. MMWR 2002;51:688, 699.
- CDC. Tularemia—United States, 1990–2000. MMWR 2002;51:182–4.
- Dennis DT, Inglesby TV, Henderson DA, et al. Tularemia as a biological weapon: medical and public health management. IAMA 2001;285:2763–73.
- Feldman KA, Enscore RE, Lathrop SL, et al. Outbreak of primary pneumonic tularemia on Martha's Vineyard. N Engl J Med 2001;345:1219–26.
- Petersen JM, Schriefer ME. Tularemia: emergence/ re-emergence. Vet Res 2005;36:455–67.

Typhoid Fever

- Crump J, Barrett TJ, Nelson JT, Angulo FJ. Reevaluating fluoroquinolone breakpoints for Salmonella enterica serotype Typhi and for non-Typhi Salmonellae. Clin Infect Dis 2003;37:75–81.
- Kubota K, Barrett TJ, Hunter S et al. Analysis of Salmonella serotype Typhi pulsed-field gel electrophoresis patterns associated with international travel. J Clin Micro 2005;43:1205–9.
- Olsen SJ, Bleasdale SC, Magnano AR, et al. Outbreaks of typhoid fever in the United States, 1960–1999. Epidemiol Infect 2003;130:13–21.

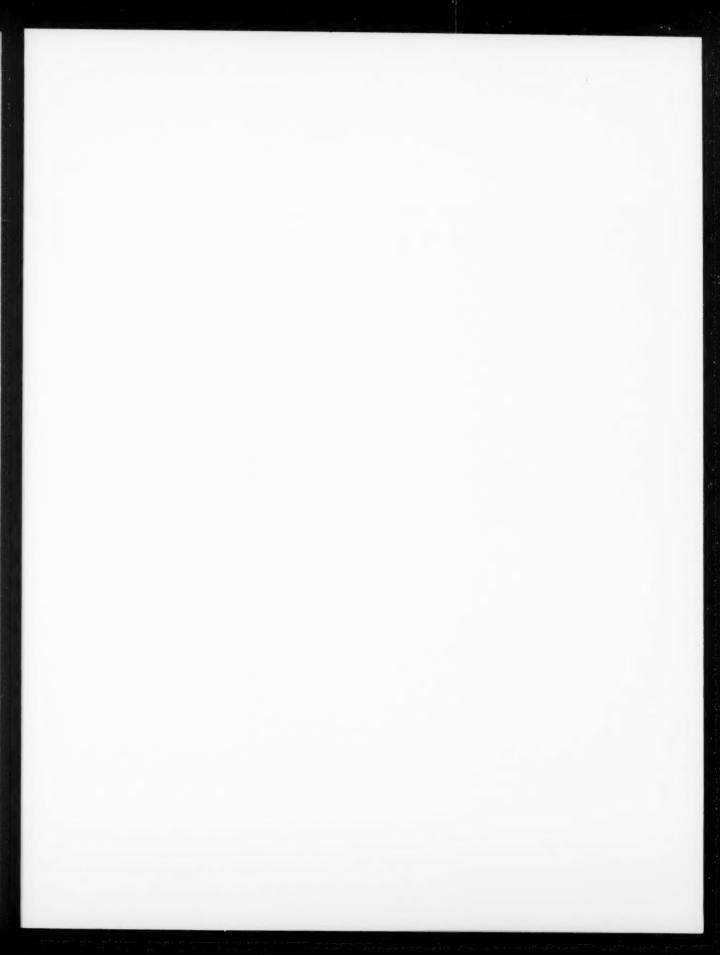
- Reller M, Olsen S, Kressel A. Sexual transmission of typhoid fever: a multi-state outbreak among men who have sex with men. Clin Infect Dis 2003;37:141–4.
- Steinberg EB, Bishop RB, Dempsey AF, et al. Typhoid fever in travelers: who should be targeted for prevention? Clin Infect Dis 2004;39:186–91.

Varicella

- CDC. Public health response to varicella outbreaks—United States, 2003–2004. MMWR 2006;55:993–5.
- CDC. Prevention of varicella: provisional ACIP recommendations for prevention of varicella. Atlanta, GA: US Department of Health and Human Services, CDC; 2006. Available at http://www.cdc.gov/nip/vaccine/varicella/varicella_acip_recs_prov_june_2006.pdf.
- CDC. Prevention of varicella: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR. In press.
- CDC. Varicella surveillance practices, United States, 2004. MMWR. In press.
- Seward JF, Zhang JX, Maupin TJ, Mascola L, Jumaan AO. Contagiousness of varicella in vaccinated cases: a household contact study. JAMA 2004;292:704–8.

Vancomycin-Intermediate Staphylococcus aureus Infection (VISA)/Vancomycin-Resistant Staphylococcus aureus Infection (VRSA)

- Fridkin SK, Hageman J, McDougal LK, et al. Vancomycin-Intermediate *Staphylococcus aureus* Epidemiology Study Group. Epidemiological and microbiological characterization of infections caused by *Staphylococcus aureus* with reduced susceptibility to vancomycin, United States, 1997– 2001. Clin Infect Dis 2003;36:429–39.
- Chang S, Sievert DM, Hageman JC, et al. Vancomycin-Resistant Staphylococcus aureus Investigative Team. Infection with vancomycin-resistant Staphylococcus aureus containing the vanA resistance gene. N Engl J Med 2003;348:1342–7.
- Whitener CJ, Park SY, Browne FA, et al. Vancomycinresistant *Staphylococcus aureus* in the absence of vancomycin exposure. Clin Infect Dis 2004;38:1049–55.
- Weigel LM, Clewell DB, Gill SR, et al. Genetic analysis of a high-level vancomycin-resistant isolate of *Staphylococcus aureus*. Science 2003;302:1569–71.
- McDonald LC, Hageman JC. Vancomycin intermediate and resistant *Staphylococcus aureus*: what the nephrologist needs to know. Nephrol News Issues 2004;8:63–4, 66–7, 71–2.



The Morbidity and Mortality Weekly Report (MMWR) Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format. To receive an electronic copy each week, send an e-mail message to listserv@listserv.edc.gov. The body content should read SUBscribe mmurtoc. Electronic copy also is available from CDC's Internet server at http://www.cdc.gov/mmur or from CDC's file transfer protocol server at ftp://ftp.cdc.gov/pub/publications/mmur. Paper copy subscriptions are available through the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone 202-512-1800.

Data in the weekly MMWR are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the following Friday. Data are compiled in the National Center for Public Health Informatics, Division of Integrated Surveillance Systems and Services. Address all inquiries about the MMWR Series, including material to be considered for publication, to Editor, MMWR Series, Mailstop E-90, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333 or to www.mmwrq@edc.gov.

All material in the MMWR Series is in the public domain and may be used and reprinted without permission; citation as to source, however, is appreciated.

Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

References to non-CDC sites on the Internet are provided as a service to MMWR readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of these sites. URL addresses listed in MMWR were current as of the date of publication.

&U.S. Government Printing Office: 2007-623-038/41006 Region IV ISSN: 1057-5987

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300
RETURN SERVICE REQUESTED

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)

ATLANTA, GA 30333

93036 0001
PROQUEST INFORMATION & LEARNING
PERIODICALS ACQUISITION
PO BOX 1346
ANN ARBOR, MI 48106-1346

FIRST-CLASS MAIL
POSTAGE & FEES PAID
PHS/CDC
Permit No. G-284



